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THE EASY CASE FOR THE PRIORITY OF SECURED CLAIMS IN BANKRUPTCY†

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For years, scholars have questioned the efficiency of secured debt, many suggesting that it transfers uncompensated risk to unsecured creditors. However, prior writing on the value of secured debt ignores the distinction between the use and the availability of secured credit. As a result, previous models of secured debt erroneously assume that a debtor that can borrow on an unsecured basis will nevertheless borrow on a secured basis to reduce interest cost.

*This Article combines theory, experience, and empirical tests to show that earlier models do not reflect the expected behavior of an economically rational debtor. These models fail to recognize that the most important form of secured debt, new money credit secured by collateral, tends to create value for unsecured creditors as well as for the debtor. A debtor that can borrow unsecured has an economic incentive not to prematurely encumber its assets because doing so gives away value in an amount—which the Article calls *Theta*—that exceeds*

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any interest cost saving. Perhaps the most significant component of this value is the increased liquidity that secured credit affords. The Article also shows that this increased liquidity does not generally keep alive debtors that should be allowed to fail, because lenders will be reluctant to extend credit, even on a secured basis, to debtors that are likely to go bankrupt. Furthermore, troubled debtors will themselves be reluctant to incur secured debt unless they can thereby avoid bankruptcy. Secured credit is therefore usually extended in these circumstances only where the liquidity would help the debtor regain viability. Accordingly, unsecured creditors themselves should want debtors to have access to secured credit.

INTRODUCTION

For years, scholars have questioned the efficiency of secured debt, many arguing that granting security to one creditor transfers uncompensated risk to unsecured creditors that cannot adjust their own terms in response ("nonadjusting creditors").¹ Scholarly debate

1. The term "nonadjusting creditors" was coined by Professors Lucian Arye Bebchuk and Jesse M. Fried. See Lucian Arye Bebchuk & Jesse M. Fried, *The Uneasy Case for the Priority of Secured Claims in Bankruptcy*, 105 YALE L.J. 857, 864, 882-91 (1996) (discussing the plight of unsecured creditors that extend credit on fixed terms prior to the creation of the security interest). Other important articles contributing to the debate on the efficiency of secured credit include David Gray Carlson, *On the Efficiency of Secured Lending*, 80 VA. L. REV. 2179, 2212-13 (1994) (arguing that risk among lenders does not have to be conserved, contrary to the commonly held belief of law and economics theorists, and thus secured lending does not shift uncompensated risk of debtor misbehavior to unsecured lenders, but instead destroys that risk); Steven L. Harris & Charles W. Mooney, Jr., *A Property-Based Theory of Security Interests: Taking Debtors' Choices Seriously*, 80 VA. L. REV. 2021, 2028-37 (1994) (noting how the proposition that subsequent secured lending harms existing unsecured lenders is based on the oftentimes false assumption that the debtor has a choice between borrowing secured or borrowing unsecured when, in fact, the debtor's choice is likely to borrow secured or not to borrow at all); Thomas H. Jackson & Anthony T. Kronman, *Secured Financing and Priorities Among Creditors*, 88 YALE L.J. 1143, 1147-48 (1979) (acknowledging that "[w]hen a debtor grants a security interest to one of its creditors, it increases the riskiness of other creditors' claims by reducing their expected value in bankruptcy," but arguing that *subsequent* unsecured lenders should be able to use interest rates to compensate for this increase); Hideki Kanda & Saul Levmore, *Explaining Creditor Priorities*, 80 VA. L. REV. 2103, 2106, 2108-11 (1994) (discussing how secured lending creates a "danger of 'risk alteration' . . . [that] certainly harms earlier creditors who did not perfectly plan for this level of risk"); Lynn M. LoPucki, *The Unsecured Creditor's Bargain*, 80 VA. L. REV. 1887, 1947-48, 1958-63 (1994) (proposing a rule under which unsecured creditors would be subject to security agreements only to the extent that a reasonable person would expect to be bound at the time unsecured credit is extended); Alan Schwartz, *Security Interests and Bankruptcy Priorities: A Review of Current Theories*, 10 J. LEGAL STUD. 1, 31-33 (1981) [hereinafter Schwartz, *Review of Theories*] (arguing that secured lending is inefficient because nonadjusting creditors will charge interest rates for unsecured debt that are not reflective of the borrower's currently leveraged position, but are higher in

over the concept of secured debt recently intensified when Professors Lucian Bebchuk and Jesse Fried of Harvard Law School published an article advocating that secured credit be limited² and Professor Elizabeth Warren (also of Harvard Law School) proposed that a portion of a debtor's collateral be set aside for unsecured creditors.³ These proposals, while intended to protect nonadjusting creditors, were criticized by leading practitioners in the field of secured finance as "exclu[ding] . . . the poor and disadvantaged (the entities who can only get credit on a secured basis)"⁴ and as reducing secured credit "by the amount of collateral 'set aside' . . . [which] would have a profound [negative] impact on American business."⁵

anticipation of the firm's becoming fully leveraged); Alan Schwartz, *Taking the Analysis of Security Seriously*, 80 VA. L. REV. 2073, 2075-77 (1994) [hereinafter Schwartz, *Analysis of Security*] (discussing how both secured and unsecured lending can reduce the value of antecedent unsecured debt, but that secured lending has the largest adverse effect); Robert E. Scott, *A Relational Theory of Secured Financing*, 86 COLUM. L. REV. 901, 937-38 (1986) (intimating that the uncompensated risk to nonadjusting creditors is the "cost" of the benefits that nonadjusting creditors derive from the policing and monitoring functions performed by secured creditors); Paul M. Shupack, *Solving the Puzzle of Secured Transactions*, 41 RUTGERS L. REV. 1067, 1099-1102 (1989) (discussing the negative impact of secured lending on involuntary unsecured creditors, such as tort claimants). Professor LoPucki observes that "[t]he debate has smoldered in the academic literature like a coal mine fire for fifteen years and gives no indication of burning out any time soon." LoPucki, *supra*, at 1890 (footnote omitted).

2. See Bebchuk & Fried, *supra* note 1. Their proposal is discussed in *infra* notes 53-54 and accompanying text. As this Article was going to press, *Cornell Law Review* published a symposium issue on the priority of secured debt. See Symposium, *The Priority of Secured Debt*, 82 CORNELL L. REV. 1279-1567 (1997). I had the opportunity to participate in a conference at Harvard Law School held as part of the symposium process, and many of the authors of the symposium articles have read and cited a draft of this Article. See, e.g., Lucian Arye Bebchuk & Jesse M. Fried, *The Uneasy Case for the Priority of Secured Claims in Bankruptcy: Further Thoughts and a Reply to Critics*, 82 CORNELL L. REV. 1279, 1283 n.11 ("Steven L. Schwarcz is currently in the process of writing an extensive critique of *The Uneasy Case*."); Steven L. Harris & Charles W. Mooney, Jr., *Measuring the Social Costs and Benefits of Identifying the Victims of Subordinating Security Interests in Bankruptcy*, 82 CORNELL L. REV. 1349, 1350 n.3 (observing that "[i]n his recent study, Steven Schwarcz refined our point in arguing that secured credit often is beneficial to unsecured creditors . . ."); Robert E. Scott, *The Truth about Secured Financing*, 82 CORNELL L. REV. 1436, 1446 ("In a thoughtful article, Steven Schwarcz argues that new money secured debt is efficient and often constitutes the only means available to viable debtors to solve liquidity crises.").

3. See generally Memorandum from Professor Elizabeth Warren, Harvard Law School, to the Council of the American Law Institute regarding "Article 9 Set Aside for Unsecured Creditors" (Apr. 25, 1996), *reprinted in* UCC BULL., Oct. 1996, at 1 [hereinafter Warren Proposal]. Professor Warren's proposal is discussed in more detail in *infra* text accompanying note 55.

4. Letter from Howard Ruda, Financing Partner at Hahn & Hessen LLP, to Geoffrey C. Hazard, Jr., Director, The American Law Institute 3 (May 22, 1996) (on file with author).

5. Letter from H. Bruce Bernstein of Sidley & Austin, General Counsel of the Commercial Finance Association, to Edwin E. Smith, Chairman of the Task Force of the Article 9 Revision Committee 2 (June 4, 1996) (on file with author).

The purpose of this Article is to examine the controversy by combining the analytical tools of theory with the judgment and insight of practice. Security interests have been around for thousands of years,⁶ and a convention that endures time and experience should not be rejected without compelling reason.⁷ Whether pure theory can provide that compelling reason is at least questionable,⁸ particularly since some of the key assumptions underlying the theory do not reflect actual experience.⁹ The advocates of regulation therefore should bear the burden of producing persuasive empirical evidence that unsecured creditors need protection—a burden they have not met.¹⁰ Indeed, this Article will demonstrate that although Bebchuk and Fried intend to protect unsecured creditors by limiting secured

6. See, e.g., *Deuteronomy* 24:10-13 (discussing a poor man's pledge of his cloak as security for a loan).

7.

[D]evices that have survived in many firms for extended periods are particularly unlikely candidates for challenge as mistakes. . . . [T]he durability of a practice both enables people to gauge its effects and allows competition among firms to weed out the practices that do not assist investors. There is no similar process of weeding out among academic ideas or regulations. Quite the contrary, mandatory terms prescribed by law halt the process of natural selection and evaluation. Unless there is a strong reason to believe that regulation has a comparative advantage over competition in markets in evaluating the effects of corporate contracts, . . . there is no basis for displacing actual arrangements as "mistakes," "exploitation," and the like.

FRANK EASTERBROOK & DANIEL FISCHEL, *THE ECONOMIC STRUCTURE OF CORPORATE LAW* 31-32 (1991) (discussing changes to corporate governance rules).

8. As stated by Isaiah Berlin:

[I]t is better to realize that we understand what goes on as we do in fact understand it—much as spontaneous, normal, simple people, uncorrupted by theories [based on inadequate data] . . . do, in fact, understand life—than to seek to subvert such common-sense beliefs, which at least have the merit of having been tested by long experience

ISIAH BERLIN, *THE HEDGEHOG AND THE FOX* 31-32 (1953) (explaining Tolstoy's view that our ignorance of how things happen in life is not due to the inaccessibility of their causes, but to our inability to coordinate the infinite multiplicity of causes).

9. See *infra* notes 73-75 and accompanying text.

10. It is particularly ironic that recent scholarship on contracting about bankruptcy suggests that pre-bankruptcy contracts may be advantageous, yet fails to make the connection between general pre-bankruptcy contracting and the specific pre-bankruptcy contract for collateral. Compare Marshall E. Tracht, *Contractual Bankruptcy Waivers: Reconciling Theory, Practice, and Law*, 82 CORNELL L. REV. 301 (1997) (arguing that the Bankruptcy Code does not, and should not, prohibit bankruptcy waivers per se), and Alan Schwartz, *Contracting About Bankruptcy*, 13 J.L. ECON. & ORG. 127 (1997) (arguing for a general relaxation of legal prohibitions against resolving bankruptcy questions by contract), with Steven L. Schwarcz, *Freedom to Contract about Bankruptcy*, 77 TEX. L. REV. (forthcoming Feb. 1999) [hereinafter Schwarcz, *Freedom to Contract*] (arguing that secured credit is merely a special case of pre-bankruptcy contracting and that the same conceptual analysis applies to both).

debt, unsecured creditors themselves should want debtors to have access to secured debt.¹¹

The secured credit controversy started when law and economics scholars applied the classic Modigliani-Miller hypothesis¹² to secured lending. The Modigliani-Miller hypothesis maintains that, in a perfect universe, every savings achieved by a change in one part of a company's capital structure will result in an offsetting of costs to other parts of the capital structure.¹³ A logical corollary of that hypothesis is that unless the universe is imperfect, changes made to a debtor-company's capital structure to benefit the debtor and a particular class of holders of claims or interests in the debtor could take value away from other classes of holders of such claims or interests. Applying this hypothesis to secured lending, law and economics scholars initially assumed that unsecured creditors would raise their rates in response to the debtor's granting of collateral to others:

Secured creditors will charge lower interest rates because security reduces their risks, but unsecured creditors will raise their interest rates in response because security reduces the assets on which they can levy, and so increases their risks. The interest rate reductions are precisely matched by interest rate increases; hence, the firm makes no net gain from granting security.¹⁴

However, those scholars later realized that, outside of a perfect universe, many creditors are nonadjusting and cannot raise their rates to compensate for the increased risk.¹⁵ Secured credit then benefits the debtor by lowering the risk and therefore the interest rate that the debtor must pay on secured credit; but that saving to the debtor can result in an uncompensated increase in risk to nonadjusting creditors.¹⁶

11. More precisely, this Article argues that because the availability of secured credit decreases a debtor's probability of bankruptcy, unsecured creditors should be economically motivated to agree *ex ante* not to limit such availability.

12. See generally Franco Modigliani & Merton Miller, *The Cost of Capital, Corporation Finance and the Theory of Investment*, 48 AM. ECON. REV. 261, 268 (1958) (theorizing that "the market value of any firm is independent of its capital structure").

13. See *id.*

14. Alan Schwartz, *The Continuing Puzzle of Secured Debt*, 37 VAND. L. REV. 1051, 1054 (1984) (emphasis omitted).

15. For an excellent history of the secured credit controversy, see Shupack, *supra* note 1, at 1073-83.

16. See LoPucki, *supra* note 1, at 1891. This is not to say that scholars have not attempted to find reasons to justify secured debt. Various theories have been put forth, such as secured credit reduces a lender's monitoring costs by enabling the lender to monitor just the collateral

Bebchuk and Fried, and Professor Warren, took the controversy a step further by suggesting that the law should protect these nonadjusting creditors by setting aside for them a portion of the collateral granted to secured creditors.¹⁷ This Article maintains that Bebhuk and Fried's piece and the other scholarly works addressing the secured debt controversy are incomplete because they fail to recognize that the most important form of secured debt, where lenders offer new money in return for collateral ("new money secured credit"),¹⁸ tends to create value for unsecured creditors as well as for the debtor.¹⁹ New money secured credit, which is the "easy" case referred to in this Article's title, must be distinguished from situations where the debtor grants security for existing debt. In the latter case, "the granting of security reduces the assets on which the remaining unsecured creditors can levy and thereby increases the risk for such unsecured creditors."²⁰ New money secured credit, in contrast, does not necessarily reduce the assets on which unsecured creditors can levy because the debtor receives the loan proceeds. More importantly, the availability of new money secured credit reduces the risk that the debtor will go bankrupt²¹ by increasing a debtor's liquidity, and therefore increases the expected value of unsecured claims.

Commentators have missed this last point because they have failed also to realize that in an imperfect universe there is a difference between the *use* of secured credit and the *availability* (and use only if needed) of secured credit. As a result, previous models of secured debt assume that a debtor that can borrow on an unsecured ba-

and not the debtor, *see* Jackson & Kronman, *supra* note 1, at 1149-52, or that debtors and secured lenders (at least those with floating liens) have ongoing relationships and therefore a common interest in ensuring the debtor's business success. *See* Scott, *supra* note 1, at 903. These and other theories were not generally convincing, and the controversy led to the Olin Conference in Charlottesville, Virginia. The ensuing debate was published in article and response form in Volume 80 of the *Virginia Law Review* (1994). That debate, however, remained inconclusive as to secured credit's general efficiency.

17. *See infra* text accompanying notes 52-55.

18. Also called "new money liens."

19. *Cf.* Kanda & Levmore, *supra* note 1, at 2105-06 (arguing that new money loans add value to the debtor's estate, but create some danger that the debtor may behave in a riskier fashion as a result of the additional obligation).

20. Steven L. Schwarcz, *The Alchemy of Asset Securitization*, 1 STAN. J.L. BUS. & FIN. 133, 148 n.52 (1994) [hereinafter Schwarcz, *Alchemy*]; *see also* Schwarcz, *Freedom to Contract*, *supra* note 10.

21. *See infra* Part III.A. Everyone would agree, of course, that loan proceeds used in a debtor's business *could* increase the actual value of the business. This Article focuses on the more controversial issue of how new money secured credit affects expected value.

sis would prefer to borrow on a secured basis to reduce interest cost.²² However, that assumption is inconsistent with the expected behavior of an economically rational debtor, as well as the experience of actual debtors.

This Article argues that a rational debtor is economically motivated not to prematurely encumber its assets. Encumbering assets gives away value in an amount, which this Article calls Theta (θ), equal to the sum of the opportunity cost of having those assets available to pledge as collateral if the debtor faces a liquidity crisis,²³ the reputational cost of encumbering the assets, and the opportunity cost of obtaining financing on a cash flow (as opposed to liquidation) basis. The value of θ is likely to exceed any interest cost saving.²⁴ Recognizing θ helps solve the puzzle of why actual debtors usually incur financing on an unsecured basis even though the interest rate may be higher than for secured credit. Theta may also explain why actual debtors are unlikely to have an economic incentive to use secured credit to take value away from unsecured creditors.

This is not to say, however, that unsecured creditors of a debtor that incurs new money liens cannot be prejudiced by subsequently occurring events. For example, they could be prejudiced by the debtor's misuse of loan proceeds. Such misuse, however, is more appropriately governed by fraudulent conveyance and preference laws²⁵ and, in certain cases, by monitoring the use of proceeds.²⁶ Unsecured creditors also could be prejudiced by a debtor's subsequent bankruptcy. However, the Article will demonstrate that the availability of

22. See, e.g., James J. White, *Efficiency Justifications for Personal Property Security*, 37 VAND. L. REV. 473, 491 (1984) ("By granting security to [its] highly risk-averse creditors, a debtor can reduce the aggregate interest cost for a given amount of debt."). Cf. James W. Bowers, *Whither What Hits the Fan?: Murphy's Law, Bankruptcy Theory, and the Elementary Economics of Loss Distribution*, 26 GA. L. REV. 27, 59 (1991) (noting the "savings the debtor achieves by borrowing from some creditors on a secured basis"); Scott, *supra* note 1, at 905 (noting "the reduction in interest charges that secured creditors are able to offer the debtor").

23. The availability of new money secured credit can be a lifeline to a debtor that needs liquidity to survive.

24. The value of θ 's components is discussed at *infra* Part III.B.

25. See Schwarcz, *Alchemy*, *supra* note 20, at 147 ("[Q]uestionable uses of proceeds are more appropriately addressed by preference and fraudulent conveyance laws . . .").

26. Some critics of secured credit also want to help control aggressive business decisions by the debtor. See, e.g., Bebchuk & Fried, *supra* note 1, at 873-74 (describing how a firm which borrows on a secured basis may pursue risky projects in an attempt to maximize shareholder wealth at the expense of creditors). If aggressive business behavior is to be controlled, it should be addressed head on. See *infra* text accompanying notes 58-62. Monitoring of proceeds is discussed in more detail at *infra* text accompanying notes 52-69.

secured credit provides liquidity, which reduces the chance of debtor bankruptcy and thereby increases the expected value of unsecured claims.²⁷ In this connection, the Article shows that imperfections in the bankruptcy process tend to make creditors reluctant to lend, even on a secured basis, to debtors that are likely to go bankrupt, and also make debtors that are likely to go bankrupt reluctant to incur secured debt.²⁸ New money secured credit therefore is usually extended only where it helps an otherwise viable debtor avoid bankruptcy, and not to support debtors that should be allowed to fail.

This Article will also demonstrate that secured credit is similar in certain economic consequences to the sale of an asset for a fair market price,²⁹ and that indeed, loan transactions often can be restructured as sales.³⁰ If secured credit were restricted, creditors therefore would have incentives to restructure their transactions from secured loans to sales. Such sales would have some of the same third party effects as secured loans, but entail higher transaction costs.

This analysis suggests that a rule of full priority for secured credit is "efficient." Although economists have two traditional definitions of efficiency—Pareto efficiency and Kaldor-Hicks efficiency³¹—this Article introduces a new concept, which I call "class Pareto efficiency." A legal rule (in this case, full priority for secured creditors) is class Pareto efficient if it is Pareto efficient when viewing each class of persons (e.g., unsecured creditors) affected by the rule as a single collective person. The term will be shown to be useful not only in solving the puzzle of secured debt, but also in analyzing broader policy issues. The Article concludes that new money liens, the proceeds of which are appropriately monitored by the secured creditor, are unlikely to deprive unsecured claims of value and, indeed, may well increase their expected value. Restrictions on new money secured credit, such as a rule of partial priority, may reduce

27. See *infra* text accompanying notes 75-90.

28. See *infra* notes 131-66 and accompanying text.

29. See *infra* Part IV.B.

30. See *Major's Furniture Mart, Inc. v. Castle Credit Corp.*, 602 F.2d 538 (3d Cir. 1979) (illustrating the ambiguous line between secured loans and sales); see also U.C.C. § 9-102 cmt. 2 (acknowledging that "[c]ommercial financing on the basis of accounts and chattel paper is often so conducted that the distinction between a security transfer and a sale is blurred."); Peter V. Pantaleo et al., *Rethinking the Role of Recourse in the Sale of Financial Assets*, 52 BUS. LAW. 159 (1996) (discussing the role of recourse in determining if a transaction characterized as a sale is a "true sale" or a loan).

31. The concepts of Pareto efficiency and Kaldor-Hicks efficiency are discussed at *infra* Part IV.A.

the value of unsecured claims by depriving a debtor of liquidity.³² Therefore, any proposed limits on the use of new money secured credit should be evaluated skeptically.³³

I. DISTINGUISHING ANTECEDENT DEBT FROM NEW MONEY LOANS

This Article does not address liens securing antecedent, or pre-existing, debt. Such liens could raise a more difficult issue because they require the debtor to grant collateral without receiving any new money. A solvent debtor that grants a lien securing antecedent debt still has enough assets left to pay its unsecured creditors, so they are not immediately prejudiced. However, an insolvent debtor will not be able to pay its unsecured creditors in full, so granting collateral to one or more unsecured creditors may take value from the remaining creditors. The conclusion of the Bebchuk and Fried article that nonadjusting creditors are prejudiced by secured credit is more likely to be correct—and Professor Warren's proposal is more likely to be appropriate—in that context.³⁴

This Article limits its scope to liens securing new money loans. It does not purport to analyze liens securing antecedent debt, other than to observe that the debtor's ability to dispose of collateral for antecedent debt is restricted to some extent by preference law.³⁵ If

32. See *infra* Part III.F.3 (comparing the expected value of unsecured claims under full and partial priority rules). This conclusion contrasts with Bebchuk and Fried's argument that "according full priority to secured claims leads to . . . inefficiencies [which] could be reduced or eliminated by according only partial priority to secured claims, and that a rule of partial priority therefore may well be superior to the rule of full priority from the perspective of efficiency." Bebchuk & Fried, *supra* note 1, at 859.

33. Professor Robert Scott questions how I can "square a new money explanation with the peculiar advantages offered to floating lien creditors and purchase money security interests (PMSIs), observing that "[i]n neither case does the extraordinary priority granted to these secured creditors fit [my] new money justification" Scott, *supra* note 2, at 1446. That may be true, but the state law priority of floating liens is generally cut off in bankruptcy. See 11 U.S.C. § 552(a). Therefore the priority of floating liens is irrelevant to the subject of this Article, priorities in bankruptcy. PMSIs, on the other hand, do maintain their priority in bankruptcy, but only because bankruptcy law recognizes their unique state law justification: to break the monopoly of the floating lien.

34. Bebchuk and Fried indeed "focus . . . on the rights of the secured creditor when an insolvent debtor enters bankruptcy;" by then, any new money would have been used up. Bebchuk & Fried, *supra* note 1, at 861.

35. See, e.g., 11 U.S.C. § 547 (1994) (empowering trustee in bankruptcy to avoid, among other things, transfers of collateral made within 90 days of an insolvent debtor's bankruptcy to secure an antecedent debt). Fraudulent transfer law also empowers a trustee in bankruptcy to avoid, among other things, transfers of property made within one year of an insolvent debtor's bankruptcy for less than a reasonably equivalent value in exchange. See 11 U.S.C. § 548(d)(2).

commentators believe that preference law is insufficient to protect unsecured creditors in these circumstances, then potential solutions might include extending the preference period past 90 days, modifying the definition of "value" under fraudulent conveyance laws to exclude the securing of antecedent debt,³⁶ or imposing a partial priority rule.³⁷ Those issues are beyond the scope of this Article.³⁸

The defining feature of a new money loan, for purposes of this Article, is that the debtor receives arms' length negotiated new value, in the form of money, in exchange for granting of collateral to the secured creditor. Yet, the critics of secured credit rarely focus on the receipt of new value by the debtor. Instead, they focus on the value that the secured party supposedly takes away from unsecured creditors:

[A] borrower and a secured creditor may have incentives [a lower interest rate for the borrower, and collateral for the secured creditor] under full priority to expend resources inefficiently encumbering an asset merely to transfer bankruptcy value from nonadjusting creditors. That is, a borrower and a secured creditor may adopt a security interest that gives the two parties a larger slice of the pie at the expense of nonadjusting creditors *even though the security interest at the same time reduces the size of the total pie*.³⁹

That narrow focus is misleading. Liens given in order to attract new money do not necessarily reduce the size of the pie; therefore new

However, because subsection (d)(2) defines "value" to include "securing of . . . [an] antecedent debt of the debtor," *id.*, fraudulent conveyance law does not cover liens securing antecedent debt.

36. Such a modification, however, would appear to be inconsistent with the concept that, for fraudulent conveyance purposes, value includes the *payment* of an antecedent debt. The better approach therefore would be to extend the preference period.

37. For example, Bebchuk and Fried, and Warren have proposed possible partial priority rules. See *infra* text accompanying notes 53-55.

38. Liens securing new money loans are by far the more common type of secured transaction. See Homer Kripke, *Law and Economics: Measuring the Economic Efficiency of Commercial Law in a Vacuum of Fact*, 133 U. PA. L. REV. 929, 934 (1985). New money loans should not be confused with purchase money security interests (PMSIs). PMSIs, although a type of lien securing new money, are much more limited because they require that the collateral be purchased or financed with the loan proceeds. See U.C.C. § 9-107 (1994). In contrast, the debtor may use the proceeds of a new money loan for any business purpose.

39. Bebchuk & Fried, *supra* note 1, at 896 (emphasis added); accord, LoPucki, *supra* note 1, at 1897-98 ("The ability to victimize involuntary creditors may in significant part explain 'why secured credit is such a widespread phenomenon.' Simply by entering into a security agreement, the debtor and a favored creditor can expropriate for themselves value that, absent the agreement, would go to involuntary creditors." (footnote omitted)).

money liens must be analyzed differently from liens given to secure antecedent debt.

It is easy to demonstrate that new money liens do not per se prejudice unsecured creditors by reducing the assets on which creditors can levy.⁴⁰ Assume a company has assets worth \$X and unsecured claims of \$Y. The company proposes to borrow new money equal to \$Z, and to secure the loan by collateral worth \$Z.⁴¹ Before the secured loan, the unsecured creditors would be paid their \$Y of claims from the \$X of assets. After giving effect to the secured loan, the loan proceeds would cause the company's assets to increase to \$X+Z, and the claims against the company would increase to \$Y+Z. In a liquidation of the company, the \$Z of secured claims would have priority over the \$Y of unsecured claims against the \$Z of assets that have been pledged as collateral. Accordingly, the \$Y of unsecured claims will be left, after the secured claims are paid, with only \$X of assets. But that is precisely the situation of the unsecured claims prior to the secured loan—so far, the pie has not been reduced.⁴²

Irrespective of the values of X, Y, and Z, a new money secured loan does not, at the time of the transfer, incrementally⁴³ prejudice unsecured creditors because the proceeds of the loan offset the collateral pledged to secure it. If this ended the analysis, new money liens would be efficient because they would not have distributional

40. See, e.g., Harris & Mooney, *supra* note 1, at 2028 (asserting that secured credit doesn't necessarily harm unsecured creditors); Shupack, *supra* note 1, at 1116-17 (making the same point in regard to a debtor's tort claimants).

41. In practice, the value of the collateral often exceeds the amount of the debt being secured. That does not, however, necessarily change the result discussed above because the debtor will be entitled under law to the surplus collateral value once the loan is paid. Unsecured creditors, therefore, can levy on that surplus value. See U.C.C. §§ 9-502(2), 9-504(2) (1995).

42. Some may observe, however, that new money liens could indirectly prejudice unsecured creditors by increasing the debtor's ratio of debt-to-equity. But that is a problem with all debt, not just secured debt. Even though new money *unsecured* loans would reduce the expected value of unsecured claims, they are not regulated. The theoretical problem is the existence of debt. See, e.g., Shupack, *supra* note 1, at 1091 ("[T]he puzzle is not one of secured transactions, but one of unsecured debt."); Kanda & Levmore, *supra* note 1, at 2110 ("[I]ncreased debt [is likely to] lead the debtor to embark on riskier projects."). Secured debt changes the problem by degree but not by kind. The practical explanation for the existence of debt must be that companies need liquidity to do business. It is important not to confuse the analysis by ascribing the evils of unsecured debt to secured debt. Accordingly, this Article focuses on whether secured debt creates any incremental evils.

43. That is, it does not prejudice the unsecured creditors any more than would the incurrence at that time of additional unsecured debt.

consequences for unsecured creditors.⁴⁴ Unsecured creditors nonetheless may be prejudiced by subsequently occurring events. Fraud or mismanagement may occur after the secured loan is made, thereby wasting the loan proceeds. Money is easier than most other forms of assets to hide or misuse.⁴⁵ Part II considers whether monitoring of loan proceeds can prevent this misuse.

II. MONITORING TO CONTROL THE MISUSE OF LOAN PROCEEDS

In considering the role law should play in preventing a debtor from misusing loan proceeds to the detriment of unsecured creditors, two distinct questions must be answered. First, should the law *generally* prevent a debtor from misusing its resources to the detriment of unsecured creditors? If so, should the law require secured lenders to monitor the debtor to prevent such misuse?

The first question—should the law generally prevent a debtor from misusing its resources—goes beyond the scope of the secured credit inquiry. Fraudulent conveyance law already prevents a debtor from perpetrating the most severe abuses, such as the transfer of assets with an actual or constructive intent to hinder, delay, or defraud creditors.⁴⁶ A more subtle concern is that “shareholders of corporations near insolvency have nothing to lose and everything to gain by the corporation’s engaging in risky ventures that might dramatically increase equity even if those ventures have a negative expected value.”⁴⁷ I have already addressed that concern in another context, and have shown that a debtor has limited obligations to creditors un-

44.

[T]he loan arrangement between a commercial borrower and a potentially secured creditor under the rule of full priority would be efficient in a hypothetical world in which the use of a security interest does not have distributional consequences for the borrower’s other creditors. . . . Under these circumstances, the creation of a security interest under full priority would never impose a negative externality on the other creditors, and a security interest could not, therefore, be used to divert value from these creditors. Consequently, a security interest would be chosen only if it were efficient. In this hypothetical world, efficiency would thus require giving full priority to the secured claim in the event of bankruptcy.

Bebchuk & Fried, *supra* note 1, at 864.

45. See, e.g., Bernard S. Black, *Bidder Overpayment in Takeovers*, 41 STAN. L. REV. 597, 613 (1989) (arguing that a company with excess cash may be more likely to spend foolishly than one without excess cash); Michael C. Jensen, *Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers*, 76 AM. ECON. REV. 323, 323, 328 (1986) (pointing out that free cash flow is at the root of many abuses by corporate managers).

46. See 11 U.S.C. § 548(a) (1994).

47. Steven L. Schwarcz, *Rethinking a Corporation’s Obligations to Creditors*, 17 CARDOZO L. REV. 647, 669 (1996) [hereinafter Schwarcz, *Rethinking Corporate Obligations*].

der creditors' rights and commercial law. A debtor may also have contractual obligations to not misuse its resources.⁴⁸ Further, corporate directors may owe fiduciary obligations to unsecured creditors when the corporation is insolvent or in the "vicinity of insolvency."⁴⁹ Those obligations arise independently of the existence of secured claims, and therefore allay Bebchuk and Fried's concern that "the ability to use secured debt under a rule of full priority to externalize further the cost of firms' activities increases the incentive of shareholders to engage in risky activities and take insufficient precautions."⁵⁰ One therefore cannot assume that secured debt will be incurred merely to gamble for the benefit of shareholders or to fund ongoing losses.⁵¹

The second question—should the law require secured lenders to monitor the debtor to prevent misuse of loan proceeds—itself has two parts: should the secured creditor monitor the debtor generally ("general monitoring"), or should it just monitor the debtor's use of proceeds ("limited monitoring")?

A. General Monitoring

Most commentators assume that some form of general monitoring of the debtor is desirable.⁵² Bebchuk and Fried, for example, argue that a "fixed-fraction priority rule" (hereinafter "partial priority") should replace the full priority rule in secured transactions,⁵³ partly because "exposing secured creditors to increased risk of loss is

48. See *id.* at 651-65, 669-77 (analyzing whether a corporation owes an obligation to creditors).

49. *Id.* at 669.

50. Bebchuk & Fried, *supra* note 1, at 914-15.

51. Schwarcz, *Rethinking Corporate Obligations*, *supra* note 47, at 686-89.

52. See, e.g., Scott, *supra* note 1, at 902 (outlining models of debtor supervision); George G. Triantis & Ronald J. Daniels, *The Role of Debt in Interactive Corporate Governance*, 83 CAL. L. REV. 1073, 1083-84 (1995) (detailing the advantages of monitoring debtors).

53. See Bebchuk & Fried, *supra* note 1, at 909-11. Part of their argument is inspired by the new German Insolvency Law, or "Insolvenzordnung," which allows the bankruptcy administrator to offset collateral disposition costs against collateral proceeds, setting a flat 6% fee percentage to approximate the amount of those costs in ordinary sales. See Insolvenzordnung §§ 170, 171 (summation and translation provided to the author by Thorsten Schmidt) (materials on file with the *Duke Law Journal*). This provision, however, is already part of United States bankruptcy law. See 11 U.S.C. § 506(c) (providing that the trustee in bankruptcy may recover from collateral the reasonable costs of preserving or disposing of such collateral) (1994). Furthermore, a partial priority rule of the type that Bebchuk and Fried advocate was considered and subsequently rejected in Germany. See Bebchuk & Fried, *supra* note 1, at 909.

likely to encourage more desirable monitoring of their borrowers.”⁵⁴ Professor Warren has proposed that Article 9 of the Uniform Commercial Code (governing secured transactions) be amended to set aside a portion of collateral for unsecured creditors, and thereby impose a partial priority rule along the lines suggested by Bebchuk and Fried.⁵⁵ For purposes of this Article, I will assume that a secured creditor has greater incentive to monitor the debtor if a portion of its claim is unsecured. The question I want to address, however, is whether the imposition of a partial priority rule, which would increase the cost⁵⁶ and restrict the availability⁵⁷ of secured credit, is the most efficient way to encourage creditors to monitor the debtor.⁵⁸

General monitoring by a secured creditor does not necessarily protect unsecured creditors; indeed, it may prejudice them. Monitoring usually means that the secured creditor will impose covenants on the debtor. Breach of those covenants will trigger default under the loan agreement, permitting the secured creditor to accelerate the maturity of its debt. Acceleration of debt may in turn prejudice unsecured creditors, because it allows the secured creditor to be repaid as soon as the debtor becomes troubled, leaving unsecured creditors

54. Bebchuk & Fried, *supra* note 1, at 909. Under this partial priority rule a fixed fraction of a secured creditor's secured claim would continue to be treated as a secured claim, and the remainder would be treated as an unsecured claim. Thus, under a 75% fixed-fraction rule, 75% of a secured claim would be given full priority over unsecured claims, and the remaining 25% would become an unsecured claim.

Id.

55. See Warren Proposal, *supra* note 3 (proposing the addition of a new subsection to U.C.C. § 9-301 and suggesting text to be attached as official commentary). Under Professor Warren's proposal, a person who becomes a lien creditor would be entitled to receive up to 20% of collateral pledged to secured creditors. See *id.*

56. See Bebchuk & Fried, *supra* note 1, at 917 (“[A] secured creditor is likely to charge a higher interest rate under a partial-priority rule than under the rule of full priority to compensate for the lower value of its bankruptcy claim.”).

57. See *id.*; see also Harris & Mooney, *supra* note 1, at 2030 (acknowledging that some loans would not be available without secured credit); René M. Stulz & Herb Johnson, *An Analysis of Secured Debt*, 14 J. FIN. ECON. 501, 501, 515-20 (1985) (demonstrating that “some profitable projects will not be undertaken by a firm which can use only equity or unsecured debt to finance them but will be undertaken if they can be financed with secured debt”). Collateral is an especially valuable incentive for lenders to small companies which do not have established track records. See Paul M. Shupack, *Preferred Capital Structures and the Question of Filing*, 79 MINN. L. REV. 787, 792-96 (1995).

58. Presumably, the secured lender neither knows nor reasonably should know that the loan proceeds will be misused; if it did, its taking of collateral could be avoided as a fraudulent conveyance. See 11 U.S.C. § 548 (1994).

unpaid if the debtor becomes insolvent.⁵⁹ Furthermore, general monitoring rarely allows a creditor to exercise control over the debtor—because lenders that control debtors may have their claims equitably subordinated in bankruptcy,⁶⁰ or can become targets of lender liability⁶¹ lawsuits, lenders usually avoid any semblance of control.⁶² General monitoring therefore neither prevents a debtor's aggressive business behavior nor ensures that a debtor always will behave in accordance with the interests of unsecured creditors.

B. Limited Monitoring

Monitoring by the secured creditor solely of the debtor's use of proceeds ("limited monitoring") may be more efficient than general monitoring of the debtor. Limited monitoring helps ensure that the debtor does not misuse (and therefore unsecured creditors receive the benefit of) the loan proceeds. The secured creditor that engages in limited monitoring usually requires the debtor to represent and warrant that it will use the proceeds for its own working capital purposes and will not transfer such proceeds to third parties for less than fair value; the creditor also may perform reasonable due diligence as to the debtor's actual use of the proceeds. Yet limited monitoring is not tied to covenants regarding the debtor's financial condition that would allow a secured creditor to accelerate the maturity of its loan in advance of unsecured creditors.

In certain circumstances, the law already imposes limited monitoring responsibilities on a secured creditor—even on one who advances new money.⁶³ If the debtor is or may become insolvent, a se-

59. Or, at least, those without cross-default clauses. However, in my experience, few (if any) unsecured creditors without covenants will have cross-default clauses.

60. See, e.g., *Taylor v. Standard Gas & Elec. Co.*, 306 U.S. 307 (1939) ("*Deep Rock*") (holding that the debt claims of a parent corporation against its bankrupt subsidiary may be subordinated to other claims or interests where the parent corporation engages in fraud or mismanagement).

61. See, e.g., *State Nat'l Bank v. Farah Mfg. Co.*, 678 S.W.2d 661 (Tex. App. 1984, writ dismissed w.o.j.) (holding bank liable for imposing new officers on a company).

62. Bebchuk and Fried assert that a "bank will be able to exert a significant amount of influence over the borrower. Indeed, a bank will frequently determine whether or not a borrower files for bankruptcy and the timing of any filing. Thus, the bank is in a unique position to control a borrower's behavior." Bebchuk & Fried, *supra* note 1, at 903 (footnote omitted). A real banker would be horrified by these statements. Interview with Arnold Ziegel, Managing Director and Senior Credit Officer, Citicorp Securities, Inc. in New York, N.Y. (June 1996) (interview notes on file with author).

63. Fraudulent conveyance law covers transfers of security interests as well as sales. See 11 U.S.C. § 101(54) (defining the term "transfer").

cured lender may be motivated to monitor the debtor's use of proceeds in order to prevent the avoidance of its security interest as a fraudulent conveyance.⁶⁴ Although fraudulent conveyance law generally protects a lender who gives "reasonably equivalent value" for collateral,⁶⁵ the transfer nonetheless can be avoided if the debtor "made such transfer . . . with actual intent to hinder, delay, or defraud" creditors.⁶⁶ The problem, of course, is that a lender may not know of the debtor's fraudulent intent. The law protects such a lender who acts in good faith.⁶⁷ For this reason, lenders to potentially insolvent debtors often monitor the debtor's use of the proceeds to demonstrate that they are acting in good faith.⁶⁸

Nevertheless, monitoring of proceeds does not fully protect nonadjusting unsecured creditors. Even if loan proceeds are not misused, their value nonetheless may diminish if the debtor's business ultimately fails. Because unsecured creditors do not benefit from an increase in the value of such proceeds,⁶⁹ yet are subject to the risk of a decrease in such value, some may argue that secured credit—even for new money—can transfer expected value from unsecured creditors. In Part III, I will argue that for unsecured creditors as a class, such a transfer of value is unlikely both in theory and in practice.

64. See *United States v. Tabor Court Realty Corp.*, 803 F.2d 1288, 1295-96 (3d Cir. 1986) (voiding collateral securing a leveraged buyout loan, where the firm knew that the exchange would render the mortgager insolvent and that fair value would not be received by the mortgagor's subsidiaries).

65. See 11 U.S.C. § 548(a)(2) (1994). New money advances should constitute "reasonably equivalent value" for collateral securing those advances.

66. *Id.* § 548(a)(1).

67. See *id.* § 548(c) ("[A] transferee . . . that takes for value and in good faith . . . may retain any interest transferred . . . to the extent that such transferee . . . gave value to the debtor in exchange for such transfer . . ."). This section also would appear to protect a good faith transferee of collateral.

68. Indeed, the good faith protection that a transferee receives under fraudulent conveyance law is generally consistent with other provisions of debtor-creditor law. For example, if an initial transfer of property can be avoided by a debtor's trustee in bankruptcy, then immediately subsequent transfers of the property also can be avoided. See 11 U.S.C. § 550(a). Alternatively, the trustee in bankruptcy can recover the value of the property from the subsequent transferee. See *id.* However, the trustee may not recover from "a transferee that takes for value, . . . in good faith, and without knowledge of the voidability of the transfer." *Id.* § 550(b).

69. Stockholders, as residual claimants, would receive that benefit.

III. ANALYZING THE TRANSFER OF VALUE FROM UNSECURED CREDITORS

According to Bebchuk and Fried, the possibility that a debtor will go bankrupt causes secured credit to transfer value away from unsecured creditors.⁷⁰ Even though Bebchuk and Fried do not clearly distinguish between liens for new money and those securing antecedent debt, their argument could apply even to new money liens, as shown by the following expected value analysis.

The expected value of a claim against a debtor that has a finite chance of bankruptcy is equal to the liquidation value of the claim multiplied by the chance of the debtor's liquidating,⁷¹ plus the non-liquidation value of the claim multiplied by the chance of the debtor's not liquidating. Assume, for example, that a debtor has \$1 million of unsecured claims and \$1 million of assets. If its chance of liquidation⁷² is 5%, and the liquidation value of its assets is 50% of their fair market value, then the expected value of the unsecured claims is equal to $(0.05 \times \$500,000) + (0.95 \times \$1,000,000) = \$975,000$. If, however, the debtor has borrowed an additional \$1 million of new money secured by all of its assets, the expected value of the unsecured claims is equal to $(0.05 \times 0) + (.95 \times \$1,000,000) = \$950,000$. The reduction is caused by the secured creditor's priority to the entire \$2 million of assets, which in liquidation (valued at 50%) is used up paying the \$1 million secured claim.

A. The Availability of Secured Credit Reduces the Chance of Bankruptcy

Bebchuk and Fried make a key assumption that does not reflect actual experience:⁷³ they assume that the granting of collateral will

70. See Bebchuk & Fried, *supra* note 1, at 898-99.

71. This Article will simplify the formula by assuming that a bankrupt debtor will liquidate. However, not all bankrupt debtors do liquidate. Therefore, the formulas presented in this Article will yield consistently lower expected values than may actually be the case. Because of this consistency, however, this simplification does not change the validity of my conclusions.

72. The likelihood that the debtor will not liquidate is, of course, derived by subtracting from 100% the likelihood that the debtor will liquidate. In this example, the likelihood of the debtor's not liquidating is equal to $100\% - 5\% = 95\%$.

73. Bebchuk and Fried make several assumptions that do not reflect actual experience. This Article already has noted that their assumption regarding secured creditor monitoring may not be valid. See *supra* Part II.A. Furthermore, their analysis of whether a partial priority rule would give rise to its own substantial costs assumes "sophisticated creditors and their borrowers." Bebchuk & Fried, *supra* note 1, at 913. Yet, they later acknowledge that "most com-

not change the probability that the debtor will become bankrupt.⁷⁴ In actuality, however, secured credit enhances debtors' liquidity, which can keep troubled but viable debtors out of bankruptcy.⁷⁵

A sensitivity analysis⁷⁶ demonstrates that a change in the chance of a debtor's bankruptcy will have a much greater effect on whether or not value is taken from unsecured creditors than will a change in other variables. It also shows that even a slight reduction in the chance of bankruptcy easily can outweigh the potential harm to unsecured creditors that would occur in the event of a bankruptcy.⁷⁷ Recall our hypothetical debtor with unsecured debt of \$1 million that is considering incurring \$1 million of secured debt. From the standpoint of the unsecured creditor, a 50% liquidation value would be the *worst* case, because it would recover nothing in the event the debtor goes bankrupt.⁷⁸ In general terms, the unsecured creditors' expected

mercial secured debt in the United States is issued by small- and medium-sized companies," *id.* at 924, and that "[s]ophisticated creditors often do not incorporate security interests into their loan agreements." *Id.* at 921. Indeed, they note that "many companies borrow from sophisticated creditors on an exclusively unsecured basis." *Id.* at 921 n.198 (citing John D. Leeth & Jonathan A. Scott, *The Incidence of Secured Debt: Evidence from the Small Business Community*, 24 J. FIN. & QUANTITATIVE ANALYSIS 379, 379 (1989)).

74. See *id.* at 890-91. At only one point in their article do Bebchuk and Fried even consider that secured credit might "boost the value of nonadjusting claims by . . . increasing the probability that they will eventually be paid in full." *Id.* at 920. However, they dismiss that "type of situation [as being] rather rare." *Id.* (citing George G. Triantis, *Secured Debt Under Conditions of Imperfect Information*, 21 J. LEGAL STUD. 225, 248-49 (1992)).

75. Companies that present more than a nominal risk of defaulting on unsecured debt may not be able to obtain financing except on a secured basis. Interview with Bruce T. Miller, Member of Senior Management, Credit Suisse, in New York, N.Y. (June 1996) (interview notes on file with author); cf. Harris & Mooney, *supra* note 1, at 2030-31 ("Experience tells us that, in many cases, the debtor's actual choice is between borrowing on a secured basis and not borrowing at all . . . [There is a] very real possibility that the additional [secured credit] might reduce the likelihood of [the debtor's] insolvency."); LoPucki, *supra* note 1, at 1935 n.181 ("When the risk of loss is high, the interest rates necessary to compensate the creditor are far above customary and legal levels. Creditors don't charge higher rates; they refuse to lend.") (citing Shupack, *supra* note 1, at 1095-98). A debtor that is not viable will probably not be able to obtain credit at all, even on a secured basis. See *infra* Part III.D (discussing imperfections in the bankruptcy process which make most lenders reluctant to lend, even on a secured basis, to debtors that are likely to go bankrupt).

76. A sensitivity analysis is a study measuring the effect of a change in a variable on the risk or profitability of an investment. See JOHN DOWNES & JORDAN ELLIOT GOODMAN, *DICTIONARY OF FINANCE AND INVESTMENT TERMS* 409 (2d ed. 1987).

77. Part III.F of this Article argues that the actual reduction of the chance of bankruptcy can be much greater than a few percent, thereby *increasing* the expected value of unsecured claims.

78. Assets worth \$2 million, when liquidated at 50% of their value, yield \$1 million. That sum would go entirely to repay the \$1 million of secured debt, leaving no recovery for the un-

value can be calculated as the probability of bankruptcy multiplied by the amount of unsecured creditors' recovery in bankruptcy, plus the probability of staying out of bankruptcy multiplied by the amount of unsecured creditors' recovery outside of bankruptcy.

Because the amount recovered by unsecured creditors will always be much higher outside of bankruptcy, a small change in the chance of the debtor's bankruptcy will have a dramatic impact on the value yielded by the formula. The impact of this variable easily changes Bebchuk and Fried's conclusion that secured credit takes value from unsecured creditors.⁷⁹ If, for example, the \$1 million secured loan in the foregoing example reduces the debtor's chance of bankruptcy from 5% to 2%, then the expected value of the unsecured claims *increases* to $(0.02 \times \$0) + (0.98 \times \$1,000,000) = \$980,000$.

Unfortunately, there are no data available on whether increased liquidity reduces the likelihood of bankruptcy.⁸⁰ Some therefore may argue that secured credit is unlikely to change the default rate on unsecured claims sufficiently to increase the expected value of those claims. Leading scholars argued a similar point in 1993 at a conference on secured debt:

[Professor Alan] Schwartz acknowledged at the 1993 Olin Conference [in Charlottesville] that the extension of additional credit might enable a debtor to increase its wealth . . . [and] that an increase in the debtor's wealth could reduce the probability of default. . . . [However,] in order to increase the expected monetary value of . . . [the unsecured claims, he argued that] the extension of additional secured credit would need to reduce the default rate by more than

secured claims. See *supra* p. 441 (explaining how to calculate the expected value of claims against a debtor with a finite chance of bankruptcy).

79. Bebchuk and Fried assume that the existence of secured credit does not affect the chance of bankruptcy. On the other hand, neither the degree of "overcollateralization" nor the secured creditor's "cherry picking" the best collateral would affect the expected value analysis. Overcollateralization means that the value of collateral pledged to secure a loan exceeds the amount of the loan; for example, a debtor may pledge \$125 of assets to secure a \$100 loan. Secured lenders almost always demand overcollateralization. Cherry-picking the debtor's best assets as collateral is merely a form of overcollateralization. But this Article already assumes in the expected value analysis that the secured creditor will be repaid in full. Because the debtor (and therefore indirectly unsecured creditors) is entitled, as a matter of law under U.C.C. §§ 9-502(2) and 9-504(2), to the surplus collateral value once the secured lender is paid, the level of overcollateralization is irrelevant to the expected value analysis.

80. That may be a subject for future empirical study. Cf. Michael J. Herbert, *The Trustee Versus the Trade Creditor: A Critique of Section 547(c)(1), (2) & (4) of the Bankruptcy Code*, 17 U. RICH. L. REV. 667, 673 (1983) ("The seller who advances credit increases the chances of the buyer's survival much more than the seller who does not. This, in turn, increases the chance that all creditors will be paid.").

31% (that is, from x to less than $0.69x$). In Schwartz' opinion, the cases in which an extension of additional secured credit (credit that would not have been extended on an unsecured basis) would decrease the probability of default by more than 31% are too scarce to support an argument for the general efficiency of secured credit.⁸¹

In contrast, Professors Steven Harris and Charles Mooney suggested that "even assuming that the 31% reduction is typical, there is no basis for accepting Schwartz' assertion that a reduction of this magnitude would occur only in rare cases."⁸²

These conclusions are not based on the debtor's *need* for liquidity⁸³ but rather are based on the fact that:

[the secured] loan proceeds that were not otherwise available could enable [the debtor] to pursue new projects, buy additional inventory or more efficient equipment, employ additional workers, or otherwise behave in a way that would decrease the likelihood that [the debtor] would fail and would enhance the prospects that [the debtor] would become more profitable.⁸⁴

In other words, these commentators only focused on whether new financing would decrease the probability of default by allowing ordinary business growth. That focus, however, is too narrow because the debtor's business may be continuing just fine without growth. Harris and Mooney indeed admit that a typical debtor has a "very low default rate even in the absence of new credit."⁸⁵

The next part of this Article will show that a better focus is to view secured credit not as a source of capital for ordinary business growth, but rather as a source of needed liquidity.⁸⁶ Illiquidity is per-

81. Harris & Mooney, *supra* note 1, at 2031-32.

82. *Id.* at 2032. The 31% number was derived from an arbitrary set of assumptions debated at the Olin Conference. Harris and Mooney argue that the 31% reduction in default rates could be smaller under a different set of assumptions. See *id.* at 2032 & n.31.

83. The debtor in Harris and Mooney's article is assumed to have a "low probability of default" of 3%. *Id.*

84. *Id.* at 2033 (footnotes omitted).

85. *Id.* at 2033 n.33.

86. I will show later that a debtor typically has strong economic incentives *not* to encumber its assets prematurely. See *infra* Part III.B. Therefore, a debtor is likely to borrow on a secured basis only when it needs liquidity and cannot borrow on an unsecured basis. Furthermore, this liquidity does *not* delay a debtor's inevitable failure. Part III.D, *infra*, argues that debtors that need liquidity and can obtain it only by borrowing on a secured basis are constrained by a system in which secured credit is likely to be extended only where it makes the debtor viable.

haps the leading cause of business bankruptcies.⁸⁷ Therefore tying secured credit to liquidity explains why it is not merely credible but *likely* that “the extension of additional secured credit would . . . reduce the default rate by more than 31%.”⁸⁸ By creating liquidity, secured credit significantly decreases the probability of default⁸⁹ and thereby increases the expected value of unsecured claims.⁹⁰

However, it is first critical to distinguish between the *availability* of secured credit and the *use* of secured credit when liquidity is needed. Although both theoretically can increase liquidity, the premature granting of collateral reduces liquidity: by encumbering assets, it reduces the future availability of collateral that can be pledged to obtain secured credit. The following analysis will demonstrate that debtors have strong economic incentives to keep assets unencumbered and therefore ensure the future availability of secured credit.

87. Most studies aimed at defining predictive ratios and univariate models of bankruptcy emphasize liquidity ratios. See, e.g., CHARLES L. MERWIN, FINANCING SMALL CORPORATIONS: IN FIVE MANUFACTURING INDUSTRIES, 1926-36, at 99 (1942) (stating that the liquidity ratio “provides the most definite indications of ultimate discontinuance”); Tyler Shumway, Forecasting Bankruptcy More Efficiently: A Simple Hazard Model 8 (Sept. 1996) (unpublished manuscript, on file with the *Duke Law Journal*) (finding that “[t]he ratio of interest expense to operating income before depreciation (IE/OI) is also a good bankruptcy predictor”); *id.* at 10 (finding that “firms with higher working capital and earnings relative to assets are less likely to fail”). But cf. EDWARD I. ALTMAN, THE PREDICTION OF CORPORATE BANKRUPTCY, A DISCRIMINANT ANALYSIS 55-58 (1988) (placing less emphasis on the liquidity ratio, but suggesting that the current ratio had substantial predictive value). It is interesting to note that Shumway claims that his model is more accurate than Altman’s model. See Shumway, *supra*, at 12.

88. Harris & Mooney, *supra* note 1, at 2032 (emphasis added).

89. See JOHN D. FINNERTY, CORPORATE FINANCIAL ANALYSIS: A COMPREHENSIVE GUIDE TO REAL-WORLD APPROACHES FOR FINANCIAL MANAGERS 271 (1986) (“A corporation will determine the desired degree of liquidity . . . with a view to reducing the risk of technical insolvency to an acceptable level. The higher the degree of liquidity, the lower this risk.” (footnotes omitted)).

90. Richard Posner made a similar point in the context of bankruptcy law when he rhetorically asked, “What if a rental payment is due [from a troubled company], and unless it is paid the assets of the company will have to be moved at great cost? Which creditor will pay it? Each will have an incentive to hang back, hoping another will step forward.” RICHARD A. POSNER, ECONOMIC ANALYSIS OF LAW 400 (4th ed. 1992). Posner’s answer is that “[b]ankruptcy law takes care of this problem by giving a superpriority to one who lends the bankrupt money essential to preserve the value of the bankrupt’s assets” *Id.* at 401. Securing new money debt is a way of obtaining the exact same result without incurring the significant cost and risk of a bankruptcy case.

B. Debtors Have Incentives Not to Prematurely Encumber Their Assets

Actual experience suggests, in accordance with the analysis of the previous section, that secured credit for new money does not necessarily transfer value from unsecured creditors. Companies that *can* borrow on an unsecured basis typically do.⁹¹ If secured credit transfers value from unsecured creditors, then why don't debtors use it more often? And if debtors could save interest cost by financing on a secured basis, why would they ever use unsecured credit? There appear to be three reasons. First, unencumbered assets themselves are valuable to debtors because if a debtor gets into trouble or faces a liquidity crisis, it may only be able to borrow on a secured basis.⁹² Second, encumbering all of one's assets signals to the business community, including a company's suppliers, that the company may no longer be viable.⁹³ Suppliers may refuse to extend trade credit, may shorten the terms of such credit, or may even insist on purchase money collateral. Other lenders may likewise refuse to extend unsecured credit. Reputational costs to the debtor discourage the use of

91. See Ronald J. Mann, *Explaining the Pattern of Secured Credit*, 110 HARV. L. REV. 625, 629 (1997) (noting that "the strongest companies in our economy ordinarily do not secure their debt"). Professor Mann acknowledges that "[t]he general absence of secured debt from the balance sheets of the most creditworthy companies is commonly asserted as an anecdotal matter." *Id.* at 629 n.15. He cites an article by Berger and Udell as "[t]he most persuasive empirical evidence" for this proposition. *Id.*; see also Allen N. Berger & Gregory F. Udell, *Collateral, Loan Quality, and Bank Risk*, 25 J. MONETARY ECON. 21, 27-40 (1990) (examining Federal Reserve data on over one million business loans and concluding that collateral is more frequently granted on riskier loans). My own analysis of 14 investment grade public companies, selected at random, shows that with extremely limited exceptions, only their non-recourse debt is secured. *Cf. infra* Part III.E (explaining why debtors use non-recourse debt even though they may be able to obtain unsecured financing). Of course, this sample is not statistically significant, and other researchers may wish to conduct larger samplings in the future. However, the sample does suggest that investment grade companies have little or no secured debt and little non-recourse debt. The primary exception is the debt carried by small businesses without established track records. This exception is easily explained, as no interest rate is sufficient to motivate a lender to accept a realistic risk of non-payment. In practice, there is not an elastic relationship between interest rates and risk. At certain levels of risk—particularly for small companies or companies without established track records—lenders may not have enough reliable information to lend long-term on an unsecured basis. Interview with Arnold Ziegel, *supra* note 62.

92. See Harris & Mooney, *supra* note 1, at 2030; Stulz & Johnson, *supra* note 57, at 515-20.

93. See Kripke, *supra* note 38, at 969-70 (1985) (noting that in the "factual world" of finance, the granting of security is an involuntary signal that a debtor is a credit risk); Harris & Mooney, *supra* note 1, at 2060 ("In some industries, the fact that a debtor has encumbered certain assets . . . is a signal that the debtor is in financial trouble.").

secured credit.⁹⁴ Finally, a debtor may prefer to borrow against cash flow, rather than asset liquidation value. Lenders assessing the potential credit of an unsecured loan look primarily to the debtor's anticipated cash flow for repayment; lenders in the business of assessing the creditworthiness of a secured loan, on the other hand, look primarily to the collateral liquidation value.⁹⁵ Liquidation value is limited to the discounted value of existing assets, and gives no credit for the debtor's business prospects.⁹⁶ Cash flow, on the other hand, includes anticipated future income of the company.⁹⁷ For a viable and growing company, cash flow therefore may be a much more valuable commodity than asset liquidation value.

Simply stated, a debtor incurs costs when it encumbers its assets. The amount of these costs, which I will designate here as Theta (θ), equals the sum of: (i) the opportunity cost of having those assets available to pledge as collateral if the debtor subsequently faces a liquidity crisis, (ii) the reputational cost of encumbering the assets, and (iii) the opportunity cost of obtaining financing on a cash flow (as opposed to liquidation) basis. The existence of θ explains why debtors—other than those that can only obtain credit on a secured basis—typically obtain financing on an unsecured basis even though the interest rate may be higher than for secured credit. Theta therefore may be thought of as a barrier to a debtor's use of secured credit.⁹⁸ It also explains why, contrary to Bebchuk and Fried's assertions, debtors are unlikely to be economically motivated to use secured credit to take value away from unsecured creditors.

We can infer θ 's existence by observing the actual behavior of debtors. Empirical studies confirm my own experience that debtors

94. See Shupack, *supra* note 57, at 795.

95. Interview with Arnold Ziegel, *supra* note 62.

96. *Id.*

97. *Id.*

98. The transaction costs of taking security, such as the cost of perfecting a security interest, are sometimes thought to be another barrier to the use of secured credit. See, e.g., Schwartz, *Review of Theories*, *supra* note 1, at 12 (arguing that security interests have high transaction costs). But there is "much disagreement on the point." LoPucki, *supra* note 1, at 1942 n.204 (citing the belief of Professors James White and Homer Kripke that these costs are "trivial"). In my experience, these transaction costs are largely irrelevant to the decision of whether or not to grant collateral. Furthermore, debtors rarely worry *ex ante* about secured creditors foreclosing on collateral because they don't anticipate defaulting on their loans. Finally, a debtor's flexibility to use or even sell its assets is not a barrier to secured credit because commercial law generally allows a debtor to retain the right to "use, commingle or dispose of all or part of the collateral" U.C.C. § 9-205 (1995). The secured party's security interest then would continue in the proceeds. See *id.* § 9-203(3).

that can obtain unsecured financing do not generally incur secured debt.⁹⁹ However, because θ is comprised of many variables, it is difficult to conceive a formula which quantifies it precisely. Presumably, θ is greater than the interest cost differential between unsecured and secured debt; otherwise, debtors generally would use secured credit. That presumption appears valid for two reasons. First, the interest cost differential between unsecured and secured debt is relatively small for a going concern.¹⁰⁰ Indeed, the debtor often gains no interest rate advantage from a secured loan if the lender would be comfortable making an unsecured loan.¹⁰¹ Second, the value of θ —particularly its component derived from the opportunity cost of keeping assets unencumbered and available to pledge as collateral if the debtor subsequently faces a liquidity crisis—is relatively large. As shown below, in a liquidity crisis unsecured credit is *unlikely* to be available, whereas secured credit is *likely* to be available. The availability of secured credit therefore protects a debtor facing a liquidity crisis.¹⁰²

A liquidity crisis means that the debtor does not anticipate having sufficient cash flow to pay its maturing debts.¹⁰³ If a lender ex-

99. See *supra* note 91 and accompanying text. An exception to this statement is non-recourse debt. As discussed in Part III.E, *infra*, θ explains the existence of non-recourse debt.

100. Interview with Bruce T. Miller, *supra* note 75; Interview with Arnold Ziegel, *supra* note 62. Although weak debtors might gain a more significant interest cost differential by offering collateral, their θ value would also be larger because weak debtors are more likely to face a liquidity crisis.

101. Collateral consisting of United States Treasury securities or other risk-free liquid assets *would* reduce the interest rate, but relatively few debtors have or would be willing to pledge such assets. Interview with Bruce T. Miller, *supra* note 75. As the rate advantage of secured debt decreases, θ becomes an increasingly compelling explanation for why debtors do not prematurely incur secured debt.

102. To this extent, θ has similarities to the concept of "financial slack" used in financial scholarship. Scholars define financial slack as the sum of a company's cash, marketable securities, and excess debt borrowing capacity. See Stephen P. Huffman & David J. Ward, *The Prediction of Default for High Yield Bond Issues*, 5 REV. FIN. ECON. 75, 78 (1996). Even though debt is a cheaper form of capital than equity, see Ida Picker, *Getting Smarter About Debt*, INSTITUTIONAL INVESTOR, Feb. 1990, at 87, 88, a company strives to maintain financial slack (and therefore excess debt borrowing capacity) because such slack gives it resources to act quickly when opportunities arise, acts as a "safeguard against a possible economic downturn," *id.*, and reduces the possibility that the company will enter bankruptcy. See Walter J. Mayer & M. Mark Walker, *An Empirical Analysis of the Choice of Payment Method in Corporate Acquisitions During 1980 to 1990*, Q.J. BUS. & ECON., Summer 1996, at 48, 50; Stewart C. Myers & Nicholas S. Majluf, *Corporate Financing and Investment Decisions When Firms Have Information that Investors Do Not Have*, 13 J. FIN. ECON. 187, 195 (1984).

103. See J. Bradley Johnston, *The Bankruptcy Bargain*, 65 AM. BANKR. L.J. 213, 221 n.39 (1991).

tends unsecured credit at an interest rate of $X\%$ to provide cash flow to repay the maturing debt, the lender effectively is putting itself in the position the debtor's existing creditors would be in if they had agreed to extend their debt maturities and increase their rate to $X\%$. Whether this is an economically viable deal will depend on the particular facts. If the deal was viable, then presumably the debtor could renegotiate its debt with existing creditors and would not need to find a new lender. Sometimes that happens. Often, however, it does not, either because negotiating with a multitude of creditors is impractical or, more commonly, because the existing creditors simply do not believe that a rate increase would outweigh the increased uncertainty of extending the debt maturities.¹⁰⁴ In the latter situation, it is unrealistic to think that an informed lender would be prepared to lend new money on an unsecured basis, irrespective of the rate offered. The debtor effectively may have only one alternative to prevent bankruptcy: a pledge of its assets as collateral in return for new money or extended maturities.¹⁰⁵ This indeed is the typical pattern that occurs in most debt workouts and corporate restructurings. Debtors that had prematurely encumbered all of their assets, however, would find it difficult or impossible to obtain any credit.¹⁰⁶

C. Negative Pledge Covenants

The foregoing discussion suggests that the value of θ ¹⁰⁷ is likely to be larger than the interest cost differential between secured and un-

104. It stands to reason that if creditors are worried about recovering principal on their loans, they will ignore the offered rate because they would have no confidence that any interest, much less interest at the offered rate, would ever be paid.

105. See *infra* text accompanying notes 122-24; cf. LoPucki, *supra* note 1, at 1930 ("My suspicion is that large companies pay higher rates of interest to borrow unsecured and that they do so in order to retain leverage in dealing with their lenders in the event of financial difficulty.").

106. One might ask whether prematurely encumbering assets would trouble a debtor that is strong enough to confidently have no future need for liquidity. Perhaps not, but then the debtor may not even need to incur debt in the first place, and if it does, the interest cost saving between its secured and unsecured debt is likely to be negligible. See *supra* notes 100-01 and accompanying text. Furthermore, nonadjusting creditors would be unharmed in either case because the debtor's bankruptcy risk is *de minimis*.

107. Because the first component of θ is so large, it is unnecessary to dwell on the other two components—reputational effects and cash flow financing. Suffice it to say that debtors are reluctant to encumber all of their assets—not only from the standpoint of their reputation in the capital markets, but also because trade creditors then are likely to shorten their trade terms or insist on the various protective devices described in *supra* text accompanying notes 93-94. Trade credit may be especially valuable to a debtor because it usually does not bear interest. Furthermore, there is often a greater opportunity cost of obtaining financing on a cash flow (as

secured debt.¹⁰⁸ That suggestion raises a dilemma. If debtors have incentives not to prematurely encumber their assets, and if appropriate use of collateral is unlikely to prejudice unsecured creditors, then why are negative pledge covenants so customary in loan agreements? Isn't the prevalence of negative pledge covenants inconsistent with this Article's assertion that unsecured creditors themselves would want debtors to have access to secured debt?

Negative pledge covenants are covenants imposed by a creditor to restrict a debtor's ability to grant collateral to other creditors.¹⁰⁹ Bebchuk and Fried argue that "the tremendously widespread use of negative pledge covenants in loan agreements" is "compelling evidence that the use of security interests is often undesirable from the perspective of efficiency."¹¹⁰ I will now argue that Bebchuk and Fried have misinterpreted the evidence, and that the existence of negative pledge covenants is actually consistent with a universe in which unsecured creditors want debtors to have access to secured debt.

Bebchuk and Fried limit their discussion to nonadjusting creditors in small and medium-sized businesses with only one institutional lender.¹¹¹ Trade creditors are the only voluntary creditors which fall into this category. However, negative pledge covenants are found primarily in bank and insurance company loan agreements; they are almost never imposed by trade creditors. Therefore, the very unsecured creditors that Bebchuk and Fried say are hurt by secured credit do not impose negative pledge covenants. More importantly, negative pledge covenants are commonly directed at restricting the se-

opposed to liquidation) basis, because cash flow lenders evaluate a debtor's credit based on the debtor's income and cost projections, whereas asset-based lenders evaluate the debtor's credit based on collateral liquidation value. For a reasonably viable company, the former evaluation is likely to yield a higher credit availability than the latter. See *supra* text accompanying notes 95-97.

108. This is true even for weak debtors. Although the interest cost differential for such debtors might be relatively large, the value of θ also would be relatively high because weaker debtors have a greater need for liquidity.

109. See Kanda & Levmore, *supra* note 1, at 2111-12 (describing three possible negative pledge covenant schemes).

110. Bebchuk & Fried, *supra* note 1, at 922; cf. Schwartz, *Analysis of Security*, *supra* note 1, at 2078 ("[N]egative pledge clauses, which prohibit later secured borrowings, are almost ubiquitous. Therefore, there is no empirical uncertainty respecting the effect of later secured debt on earlier unsecured debt: the former reduces the value of the latter."); Kanda & Levmore, *supra* note 1, at 2108-11 (arguing that "a debtor's first creditor . . . can be made worse off by the debtor's subsequent borrowing from later creditors . . . because the additional debt may encourage the debtor to invest in riskier projects").

111. See Bebchuk & Fried, *supra* note 1, at 922.

curing of antecedent debt, and much less frequently restrict new money liens.¹¹² Even negative pledge covenants that on their face restrict all secured credit typically have “baskets” that permit up to a specified amount of new money liens.¹¹³ This practice suggests, under Bebhuk and Fried’s logic, that new money liens indeed may be efficient.¹¹⁴

Even if negative pledge covenants flatly restricted all secured debt, that would not prove that unsecured creditors regard security interests as undesirable. Such restrictive covenants would give unsecured creditors the power to block future security interests, but those creditors later could choose to waive the covenants. Based on my experience, unsecured creditors frequently choose to waive negative pledge covenants in exchange for a quid pro quo, such as becoming equally and ratably secured. Negative pledge covenants thereby allow unsecured creditors to get their cake (by affording the debtor the liquidity arising from secured credit) and eat it too (by becoming equally and ratably secured). Because negative pledge covenants provide benefits at no costs, it would be irrational for unsecured creditors not to ask for them.

Negative pledge covenants nonetheless may entail costs for the debtor. If a negative pledge covenant has no basket (or an insufficient basket) for new money liens, it might restrict the debtor’s future liquidity.¹¹⁵ That cost explains why, in my experience, debtors generally do *not* agree to negative pledge covenants when they issue debt to public investors (or in other circumstances where it may be difficult to obtain waivers).¹¹⁶ Instead, these debtors typically agree to covenants that prohibit the debtor from securing debt without

112. Interview with Arnold Ziegel, *supra* note 62.

113. *Id.*

114. See Bebhuk & Fried, *supra* note 1, at 922. If, as Bebhuk and Fried have stated, the widespread use of negative pledge covenants is “compelling evidence” of their efficiency, see *supra* text accompanying note 110, then it would follow that the typical use of baskets that permit new money liens would be evidence of their efficiency.

115. The enforceability of negative pledge covenants is itself not entirely free from doubt. Cf. U.C.C. § 9-311 (1995) (“The debtor’s rights in collateral may be voluntarily or involuntarily transferred (by way of . . . creation of a security interest . . .) notwithstanding a provision in the security agreement prohibiting any transfer or making the transfer constitute a default.”). Although the “debtor’s rights in collateral” would appear to be only its right to surplus collateral, the language of this section is ambiguous.

116. See Morey W. McDaniel, *Are Negative Pledge Clauses in Public Debt Issues Obsolete?*, 38 BUS. LAW. 867, 867 (1983) (indicating that covenants in public debt offerings most commonly prohibit borrowers from securing their debt without equally and ratably securing their lenders).

equally and ratably securing the beneficiaries of the covenants. The debtor therefore maintains control over its ability to secure debt and ensures itself of future liquidity.

The existence of negative pledge covenants therefore is inconclusive evidence of the efficiency of secured credit. Indeed, in my experience, unsecured creditors who consider these covenants think of them less from the standpoint of economics than from what might be called the "Superman III Theory." In the movie *Superman III*, the villain stated the theory as his personal credo: "It is not enough that I win, but that everyone else must lose."¹¹⁷ Some creditors may simply want to deprive others of collateral if they do not themselves get collateral.¹¹⁸ More sophisticated creditors view a debtor's grant of collateral as an early warning that the debtor is experiencing financial problems and is using collateral as a bargaining chip to restructure some of its loans with third parties.¹¹⁹ Those creditors use negative pledge covenants to force the debtor to the negotiating table while the debtor is still viable.¹²⁰ That explains why even fully secured lenders almost always impose negative pledge covenants on their debtors.¹²¹

D. Should Debtors that Need Liquidity and Cannot Obtain Unsecured Financing Be Allowed to Fail?

I have argued that debtors are economically motivated not to incur secured debt until they need liquidity. That does not necessarily mean that secured debt is efficient. It may be more efficient to let struggling debtors fail. This section of the Article argues that in many instances, such failures are inefficient.

Keep in mind for purposes of the following discussion that we are focusing on a debtor that needs liquidity but cannot obtain unse-

117. *SUPERMAN III* (Warner Bros. 1983).

118. While commenting on an earlier draft of this Article, one of my colleagues, Richard Schmalbeck, suggested that the "Superman III" argument may "not fly, nor even leap tall buildings, in an area of commentary that operates on the strong assumption that actors [apparently no pun intended] are at all times pursuing rational ends." Undoubtedly, there really are people who, like the character in *Superman III*, derive utility from being mean-spirited. Gore Vidal, for example, is reputed to have said, "It is not enough to succeed. Others must fail." J.M. COHEN & M.J. COHEN, *THE PENGUIN DICTIONARY OF TWENTIETH-CENTURY QUOTATIONS* 387 (rev. ed. 1993) (citing G. Irvine, *Antipanegyric for Tom Dreiberger* (Dec. 8, 1976)).

119. Interview with Arnold Ziegel, *supra* note 62.

120. *Id.*

121. *Id.*

cured credit. In theory, the debtor's choices are to sell assets, issue equity, borrow on a secured basis, or file for protection under bankruptcy law. Some of these options, however, may not be available in practice. For instance, a debtor whose credit is inadequate to borrow on an unsecured basis might find it difficult to sell equity at an acceptable price; it may be difficult to find investors prepared to pay significant sums to become residual risk claimants of a company that may not be able to pay its primary claimants (unsecured creditors).¹²² Furthermore, the debtor may be reluctant to sell assets unless it happens to own non-producing or financial assets. If a debtor sells most of its producing assets—meaning assets that produce goods and services—it would be liquidating its business.¹²³ Therefore a debtor's real choice is often between borrowing on a secured basis and trying to reorganize under Chapter 11 of the Bankruptcy Code.¹²⁴

Secured credit is not equivalent to liquidation. The debtor that obtains secured credit is permitted to use the collateral¹²⁵ and therefore can obtain financing while continuing to operate its business. Bankruptcy, on the other hand, may carry a negative stigma and cre-

122. This assumes that the investor is not making a strategic investment, such as to gain corporate control of the debtor. In my experience, stock of public companies may trade at some price even when a company is on the verge of filing bankruptcy, suggesting that at least some investors are betting there is or will be residual value in the company. Indeed, I have seen two situations where troubled companies were able to refinance debt by issuing stock during a bull market. Nonetheless, the issuance of new stock may not always be a realistic option to a financially distressed company because the trading price is likely to be so low that huge amounts of cheap new stock would be required to raise the amount of needed liquidity. This type of stock issuance not only might dilute the value of the existing stock, but also could raise control issues.

123. One might ask whether a debtor therefore would choose to sell and lease back its income producing assets, the so-called "sale-leaseback" transaction. If the sale-leaseback is a true sale and a true leaseback, the debtor may have difficulty negotiating an acceptable purchase price or even finding a buyer for assets that do not have recognized markets. Used factory equipment, for example, is unlikely to have a recognized market. If the price is too low, the debtor is giving up significant value. The debtor also gives up use of the asset after the lease term expires. Furthermore, buyers may not be willing to lease assets back to troubled debtors because lease payments themselves are unsecured obligations. In my experience, many sale-leasebacks are really disguised secured financing transactions which would be characterized as security interests under commercial law. See U.C.C. § 1-201(37) (1995) ("Whether a transaction creates a lease or security interest is determined by the facts of each case . . .").

124. See 11 U.S.C. §§ 1101-1174 (1994). For an introduction to Chapter 11 reorganization, see generally Steven L. Schwarcz, *Basics of Business Reorganization in Bankruptcy*, 68 J. COM. BANK LENDING 36 (1985) [hereinafter Schwarcz, *Basics of Business*], revised and updated in A SPECIAL COLLECTION FROM THE JOURNAL OF COMMERCIAL BANK LENDING 79 (1988).

125. See 11 U.S.C. § 363(b)-(c).

ates a risk that the management will be replaced.¹²⁶ It also subjects the debtor to the control and oversight of the bankruptcy court. Most debtors will therefore prefer to obtain liquidity by borrowing on a secured basis rather than by filing bankruptcy. The following discussion, however, shows that imperfections in the bankruptcy process discourage that preference where the debtor's bankruptcy is likely.

If the debtor chooses secured borrowing, should the law restrict that choice by limiting the availability of secured debt?¹²⁷ I generally presume that sophisticated parties (such as the debtor and a secured creditor) should be able to make voluntary choices, so long as those choices create no externalities. It is therefore important to consider whether allowing the debtor to incur secured debt at this stage would create externalities by reducing the expected value of unsecured claims. A simple computation suggests that the expected value of unsecured claims is likely to increase. Consider the hypothetical bankrupt debtor with \$1 million of assets and \$1 million of unsecured claims. We saw that assuming a 50% liquidation value, the expected value of the unsecured claims is equal to $(1 \times \$500,000) + (0 \times \$1,000,000) = \$500,000$.¹²⁸ If, however, the debtor is able to borrow an additional \$1 million of new money secured by all of the debtor's assets, the expected value of the unsecured claims is likely to increase, because the now liquid debtor has a better chance to avoid bank-

126. Management is likely to continue operating the debtor in a bankruptcy unless a trustee in bankruptcy is appointed, for cause, to replace it. *See id.* §§ 1107-1108.

127. Bebchuk and Fried argue that debtors who need secured debt *should* be allowed to go bankrupt. *See* Bebchuk & Fried, *supra* note 1, at 895-904 (arguing that five types of inefficiencies arise under the rule of full priority). They reason that secured borrowing by nonviable firms transfers value from unsecured creditors and that "value is lost as a result" of the secured lending. *See id.* at 867. That argument, however, has two components. The first is that secured debt, in lieu of unsecured debt, makes the rate artificially low and therefore attractive to the debtor. *See id.* at 896-97. That first argument is irrelevant because nonviable firms often cannot obtain unsecured financing. The second component of their argument is that it would be inefficient to allow a nonviable firm to use secured debt to continue operating. That may well be true, but in my experience, most firms that can borrow only on a secured basis are not nonviable, but merely are experiencing liquidity problems. Furthermore, small companies, middle-market companies, and non-investment grade firms often can borrow only on a secured basis. *See* Lynn M. LoPucki, *The Death of Liability*, 106 YALE L.J. 1, 14 (1996) (noting that the lenders of "small, relatively uncreditworthy businesses . . . [usually] insist on security interests"); Mann, *supra* note 91, at 628-29 (attempting to explain the borrower's decision to grant collateral using existing empirical data and interviews with borrowers); Ronald J. Mann, *The Role of Secured Credit in Small Business Lending*, 86 GEO. L.J. 1 (1997) (analyzing the use of secured credit by "relatively" small businesses).

128. *See supra* p. 441 (describing how to calculate the expected value of unsecured claims).

ruptcy. So long as the debtor has reduced its probability of bankruptcy to less than 50%, the expected value of the unsecured claims will increase. For example, if the chance of bankruptcy is 49%, the expected value of unsecured claims is equal to $(0.49 \times 0) + (0.51 \times \$1,000,000) = \$510,000$. This value exceeds by \$10,000 the expected value if security were restricted.

Of course, if liquidity increases the debtor's chance of avoiding bankruptcy, the expected value of the unsecured claims would be even larger. The secured credit is therefore unlikely to create externalities.¹²⁹ This result becomes intuitively obvious once one recognizes how seriously bankruptcy affects unsecured creditor recovery. If the debtor chooses bankruptcy, historical data show that a typical unsecured creditor would recover a very small portion of its claim, perhaps 5 to 20 cents on the dollar.¹³⁰

This example assumes that the liquidity associated with secured credit gives the debtor a significant chance of avoiding bankruptcy. That assumption is reasonable not because liquidity is always a panacea to a debtor's problems, but because imperfections inherent in the bankruptcy process make most lenders reluctant to lend, even on a secured basis, to debtors that are likely to go bankrupt.¹³¹ The imper-

129. Externalities are not necessarily present even if the debtor eventually goes bankrupt after obtaining secured credit. The secured financing may have enabled the debtor to maximize its value, such as by making rental payments that avoid having to move the debtor's assets at great cost. As Richard Posner has noted:

[U]ltimate liquidation doesn't prove that a reorganization [loan] was a mistake. . . . [I]t might well be that [the firm's] plant would never be replaced, as distinct from being replaced with a smaller plant, and yet the firm might be able to cover its variable costs until the plant wore out, in which event liquidation might be premature until then.

POSNER, *supra* note 90, at 404 n.6.

130. See Bebchuk & Fried, *supra* note 1, at 886 n.107 ("[I]n the United States, general unsecured creditors can expect to receive nothing in bankruptcy 80% of the time and an average of 4-5 cents on the dollar 20% of the time.") (citing Lynn M. LoPucki, *A General Theory of the Dynamics of the State Remedies/Bankruptcy System*, 1982 WIS. L. REV. 311, 311). Of course, those data reflect a system in which secured credit is allowed; a system in which secured credit is restricted could result in higher recoveries. On the other hand, even if secured debt were restricted prepetition, unless it also were restricted postpetition, the Bankruptcy Code would permit the debtor to incur secured (or other priority) debt for liquidity if, as is almost assuredly the case, the bankrupt debtor could not raise unsecured credit. See 11 U.S.C. § 364. Therefore, even in a system that restricts prepetition secured debt, section 364 is likely to keep recoveries by unsecured creditors low.

131. Lenders generally will not make loans, secured or otherwise, unless they have "two ways out," meaning two potential methods of repayment. One way out may well be the collateral's liquidation value, but the second way out is usually cash flow from the ongoing business. Interview with Arnold Ziegel, *supra* note 62. Lenders therefore do not make loans to debtors

fections inherent in the bankruptcy process include: (i) the automatic stay against enforcement of collateral remedies; (ii) the risk that a secured creditor's collateral will be replaced by substitute collateral that the secured lender may value less; and (iii) a secured lender's inability under fraudulent conveyance law to secure its debt by collateral of excessive value coupled with the fact that an oversecured lender is not always legally entitled to its full collateral cushion. Contrary to initial impressions, these imperfections make debtors themselves reluctant to incur secured debt unless the additional credit makes bankruptcy unlikely. Therefore liquidity usually is extended *only* where it helps an otherwise viable debtor avoid bankruptcy.

The first imperfection is that every collateral contract is subject to the automatic stay under section 362 of the Bankruptcy Code.¹³² The secured creditor's bargained-for-remedies against the collateral¹³³ are therefore suspended.¹³⁴ As a result, "the secured creditor has a significant interest in . . . the continued viability of the borrower. . . ."¹³⁵

The second imperfection arises because a bankruptcy judge has discretion, after notice and a hearing, to allow a debtor to "use, sell, or lease"¹³⁶ the secured creditor's collateral if the secured creditor receives "adequate protection."¹³⁷ The Code does not clearly define "adequate protection." It merely stipulates that such protection includes a "replacement lien" or even "such other relief . . . as will result in [giving the secured creditor] the indubitable equivalent of" the

unless they believe the debtors are viable business entities. Furthermore, few lenders are prepared to lend on a subordinate lien basis, even if there is significant collateral surplus. *Id.* Even though the subordinate lienholder can claim against the surplus value, see U.C.C. § 9-502(2) (1995), lenders are wary of valuation issues and disputes. See, e.g., PETER H. WEIL, *ASSET-BASED LENDING: A PRACTICAL GUIDE TO SECURED FINANCING* 513-51 (2d ed. 1992) (describing the manner in which subordinate debtholders and lienholders receive value after senior claims have been satisfied).

132. Under the so-called "automatic stay," a bankruptcy petition "operates as a stay, applicable to all entities, of . . . any act to . . . enforce against property of the debtor any lien" 11 U.S.C. § 362(a)(5).

133. The U.C.C. provides, for example, that "[w]hen a debtor is in default under a security agreement, a secured party has the rights and remedies provided in [the U.C.C.] and [with limited exceptions] those provided in the security agreement." U.C.C. § 9-501(1). The automatic stay renders those remedies ineffective.

134. See Schwarcz, *Alchemy*, *supra* note 20, at 150 ("[I]f the borrower enters bankruptcy, an automatic stay will freeze the secured creditor's ability to exercise remedies against the collateral and thereby impair the secured creditor's collateral position.").

135. *Id.*

136. 11 U.S.C. § 363(b)(1).

137. *Id.* § 363(e).

collateral.¹³⁸ This vagueness reflects the notion that adequate protection is a “flexible concept to be tailored to the individual facts and circumstances of each case.”¹³⁹ For this reason, “[a]dequate protection is an estimate that is always, to some extent, uncertain and unreliable.”¹⁴⁰ As a result, “adequate protection sometimes proves inadequate, and the creditor’s interest actually loses value.”¹⁴¹

The third imperfection arises because an oversecured lender is not always legally entitled to its full collateral cushion and therefore faces a significant risk that it will lose at least a portion of its collateral.¹⁴² A lender secured by collateral valued at, say, twice the outstanding debt runs the risk that a court, exercising its equitable powers,¹⁴³ will decide that some portion of the cushion is unnecessary to protect the lender. This is likely to arise where a portion of the collateral consists of cash that the debtor needs to help in its reorganization and the judge finds (whether or not the secured lender agrees) that the remaining collateral is sufficient to protect the lender.¹⁴⁴ It

138. *Id.* § 361(2)-(3).

139. *In re Tellier*, 125 B.R. 348, 349 (Bankr. D.R.I. 1991).

140. DAVID G. EPSTEIN ET AL., BANKRUPTCY § 3-27(d), at 148 (1993).

141. *Id.* at 149.

142. A lender also might risk its collateral being voided as a fraudulent conveyance if it demands collateral that is excessive relative to the debt. See Kenneth J. Carl, *Fraudulent Transfer Attacks on Guaranties in Bankruptcy*, 60 AM. BANKR. L.J. 109, 121-22 (1986) (“[U]nder the [Uniform Fraudulent Conveyance Act], a debtor’s granting of a security interest or mortgage in ‘excessive’ collateral may be a fraudulent conveyance.”); Andrew J. Nussbaum, *Insider Preferences and the Problem of Self-Dealing Under the Bankruptcy Code*, 57 U. CHI. L. REV. 603, 620 (1990) (discussing a case in which “the excessive value of the collateral for the loan . . . made the parties’ fraudulent intent unmistakable”).

143. Bankruptcy courts have equitable power to “issue any order, process, or judgment that is necessary or appropriate to carry out the provisions of” the Bankruptcy Code. 11 U.S.C. § 105(a).

144. See *In re T.H.B. Corp.*, 85 B.R. 192, 194-95 (Bankr. D. Mass. 1988) (holding that a debtor may use cash collateral without granting a substitute lien or making cash payments because the remaining collateral constituted a “sufficient ‘cushion’ of collateral value in excess of the debt,” and “the [remaining] collateral value far exceed[ed] the debt.”); *In re Stein*, 19 B.R. 458, 460 (Bankr. E.D. Pa. 1982) (holding that debtors in that case were entitled to use cash collateral without providing adequate protection because such use was necessary “to meet operational costs” and because the lenders’ “secured position can only be enhanced by the continued operation of the farm”).

The court in *Stein* went on to note that it was faced with “two irreconcilable and conflicting interests”:

The holder of a lien on cash collateral must not be left unprotected by unrestricted use of the collateral by the debtor. However, the purpose of Chapter 11 is to rehabilitate debtors and generally access to cash collateral is necessary in order to operate a business. The equities in each case must be weighed in striking a balance.

also may come up if the debtor needs postpetition financing and can obtain it only by granting a senior or equal lien on the collateral to a postpetition lender.¹⁴⁵ Therefore, a prospective secured lender cannot even assume that lending significantly less than the collateral's expected liquidation value will be a riskless transaction.

As a result of these imperfections in the bankruptcy process, most lenders are reluctant to lend, even on a secured basis, to debtors that are likely to go bankrupt.¹⁴⁶ Of course, some lenders may be prepared to charge very high fees for lending small amounts on a secured basis to a statistically large number of debtors that *are* likely to go bankrupt.¹⁴⁷ However, those debtors have their own incentives to forego that secured debt.¹⁴⁸

A debtor that is likely to go bankrupt faces a number of options which might include asset sales, cost cutting, or other business strategies. I have already suggested that for most debtors, the real choice is often between borrowing on a secured basis and seeking bankruptcy protection.¹⁴⁹ Faced with these limited choices, a debtor is likely to choose the bankruptcy protection unless the liquidity provided by the secured credit makes it unlikely that the debtor will fail.

Three dynamics shape the debtor's decision. The first dynamic is that the debtor's officers will want to keep their jobs, and therefore will favor the choices that maximize their job security. If the debtor

Id. at 459. For cases holding that the existence of a sufficiently large collateral cushion itself constitutes adequate protection, see, for example, *In re Charay Indus., Inc.*, 23 B.R. 988, 997 (Bankr. E.D. Mich. 1982) ("The plaintiff is . . . adequately protected by the equity cushion in its collateral and will not be in need of [additional] adequate protection until the total of interest accruals plus the principal balance *begins to approach* the value of the collateral" (emphasis added)); *In re Rogers Dev. Corp.*, 2 B.R. 679, 685 (Bankr. E.D. Va. 1980) (noting that "there is no unconstitutional deprivation of property by the erosion of the equity cushion"); 2 COLLIER ON BANKRUPTCY § 361.01, at 361-69 (Lawrence P. King ed., 15th ed. 1996) ("It does appear that as a constitutional matter protection of the creditor's cushion is not required.").

145. See 11 U.S.C. § 364(d). Although such senior or equal liens are not permitted unless the original secured lender is afforded "adequate protection," the judge may find that the lender's remaining collateral is sufficient protection. See *infra* notes 150-51 and accompanying text.

146. Interview with Arnold Ziegel, *supra* note 62.

147. Insurance companies operate in a similar manner when they insure or reinsure a statistically manageable number of catastrophic events.

148. Indeed, in my experience, lenders often condition their credit to companies likely to go bankrupt on the debtor's first filing a voluntary bankruptcy petition; that way the postpetition credit can be advanced under the protection of a court order and with priority pursuant to 11 U.S.C. § 364.

149. See *supra* text accompanying note 124.

is likely to go bankrupt even after obtaining the secured financing, then the secured credit only delays the inevitable. Although delaying the inevitable sometimes can be valuable for managers who wish to retain their positions, the negative consequences of delay could wipe out its benefits. When the debtor goes bankrupt, its assets will be encumbered and it will be harder for the debtor to ultimately negotiate a successful plan of reorganization, both because the debtor will find it more difficult to obtain postpetition financing to operate¹⁵⁰ and because a court may not confirm a reorganization plan under Chapter 11 unless the secured creditors agree to the plan or receive at least the liquidation value of their collateral as of the date of the plan.¹⁵¹ The inability to achieve a plan of reorganization may well lead to the debtor's liquidation.¹⁵² Secured credit that does not render unlikely the debtor's risk of bankruptcy therefore constitutes, *ex ante*, a "Faustian Bargain." If the debtor subsequently goes bankrupt, it has encumbered its assets for only temporal gain.¹⁵³

On the other hand, if a debtor files a reorganization case under Chapter 11 without encumbering its assets, it retains much greater flexibility to negotiate its plan of reorganization. This flexibility increases the likelihood that the debtor will be able to achieve a successful plan of reorganization. Although agency costs¹⁵⁴ could distort the decision, officers and directors often stay in their jobs during a reorganization.¹⁵⁵ If the debtor is successfully reorganized, the man-

150. Debtors often need postpetition financing to operate during the period of the Chapter 11 reorganization case. A debtor that has encumbered all of its assets will find it more difficult to obtain this financing. See Alec P. Ostrow, *Constitutionality of Core Jurisdiction*, 68 AM. BANKR. L.J. 91, 116 n.187 (1994).

151. See 11 U.S.C. § 1129(a)(7)(A).

152. See 11 U.S.C. § 1112(b) ("[T]he court may convert a case under this chapter [11] to a case under chapter 7 . . . for cause, including . . . (2) inability to effectuate a plan [of reorganization].").

153. Faust was a legendary astrologer who sold his soul to the devil in exchange for earthly knowledge and power. See JOHANN WOLFGANG VON GOETHE, *FAUST: A TRAGEDY IN TWO PARTS* (Bayard Taylor trans., Oxford Univ. Press 1932) (1790). By analogy, the debtor would have encumbered its assets, ultimately causing its bankruptcy liquidation (damnation), in exchange for only a temporal gain.

154. The term "agency costs" refers to the inherent conflict of interest between a firm and its managers. Managers, for example, presumably want job security and high income whether or not those goals benefit the firm.

155. Sections 1107 and 1108 of the Code provide that, unless the bankruptcy court orders otherwise (which rarely happens in Chapter 11 reorganization), the debtor's existing management will continue to manage the debtor during the course of its reorganization case. See 11 U.S.C. §§ 1107-1108; see also Edward S. Adams, *Governance in Chapter 11 Reorganizations: Reducing Costs, Improving Results*, 73 B.U. L. REV. 581, 610-11 (1993) ("Chapter 11 . . . offers

agement might even continue as officers and directors of the reorganized company.¹⁵⁶ By maximizing job security, a Chapter 11 reorganization, and not an ultimately futile secured borrowing, is in the outright self-interest of management.¹⁵⁷

The second dynamic in favor of a Chapter 11 reorganization is that a large number of business debtors are corporations,¹⁵⁸ and corporations are managed by their boards of directors. Directors generally owe their obligations to the corporation's shareholders¹⁵⁹ and also to the creditors of an insolvent or contingently insolvent corporation.¹⁶⁰ In either case, the directors would have an obligation to choose the Chapter 11 reorganization over a futile secured financing because the reorganization not only maximizes the likelihood of

managers [of a corporate debtor] an opportunity to retain their jobs This inducement of continued employment, intended by Congress, is particularly appealing to management" (citations omitted)). *But cf.* Lynn M. LoPucki & William C. Whitford, *Corporate Governance in the Bankruptcy Reorganization of Large, Publicly Held Companies*, 141 U. PA. L. REV. 669, 722-37 (1993) (presenting data suggesting that "[t]he turnover rate for CEOs of [publicly held corporations with \$100 million or more in assets and undergoing a Chapter 11 reorganization confirmed before March 15, 1988] was much higher than the turnover rate for CEOs of most large, publicly held companies" during the same period).

156. See Daniel B. Bogart, *Liability of Directors of Chapter 11 Debtors in Possession: "Don't Look Back—Something May Be Gaining on You,"* 68 AM. BANKR. L.J. 155, 234 (1994) ("The primary personal objective of officers and senior management during chapter 11 is often to retain their jobs."). As noted by Professor Edward Adams, although

[t]wo studies report that on average only 29% of corporate managers and only 46% of incumbent directors remain in office following a corporate reorganization, . . . [t]he obvious retort to these studies, even accepting their findings, is that for managers and directors a 30-50% chance of retaining their jobs is better than the prospect that awaits them if the firm is liquidated: unemployment.

Adams, *supra* note 155, at 610-11 n.146 (citations omitted).

157. An exception may arise where insiders of privately held companies fear the possibility of dividend or salary recapture, or that insider loans made to them may be enforced in a bankruptcy. In those situations, insiders might agree to an inappropriate secured borrowing merely in order to avoid, or delay, the scrutiny of a bankruptcy court.

158. See Susan Block-Lieb, *Fishing in Muddy Waters: Clarifying the Common Pool Analogy as Applied to the Standard for Commencement of a Bankruptcy Case*, 42 AM. U. L. REV. 337, 351 n.39 (1993) ("Most often a business debtor will be a corporation, partnership, or other business association . . .").

159. See *Pepper v. Litton*, 308 U.S. 295, 306 (1939); Schwarcz, *Rethinking Corporate Obligations*, *supra* note 47, at 665.

160. See, e.g., *Credit Lyonnais Bank Nederland v. Pathé Communications Co.*, No. 12150, 1991 Del. Ch. LEXIS 215, at *108 (Dec. 30, 1991) (stating that when a corporation is "operating in the vicinity of insolvency," the board of directors' fiduciary duties extend not only to its shareholders, but to the corporation's creditors); Schwarcz, *Rethinking Corporate Obligations*, *supra* note 47, at 665-77 (explaining that when a corporation is insolvent its creditors acquire rights traditionally associated with ownership and therefore are owed a fiduciary duty by the corporation's directors).

shareholder recovery¹⁶¹ but also minimizes the harm to existing creditors.¹⁶²

The third dynamic is the negative reputational effects associated with bankruptcy. Although the debtor obviously wants to avoid these negative effects, the first two dynamics would appear to strongly outweigh this third dynamic.¹⁶³ Negative reputational effects are getting smaller as larger and more well-known companies take advantage of Chapter 11 to reorganize. If the secured financing would be futile anyway, those reputational effects would merely be delayed, not avoided, by a secured financing.

This is not to say that in individual cases θ is not sometimes undervalued, or that managers who lack or ignore legal counsel will not sometimes be unrealistically optimistic in assessing whether the liquidity of a secured loan will return the debtor to viability. Professor Susan Rose-Ackerman, for example, observes that “[w]hen already in a situation that offers little or no chance of gain [such as a bankruptcy *liquidation*], people take risks. They gamble on a chance of breaking even, even though if things go wrong, they may incur very large losses.”¹⁶⁴ However, a Chapter 11 reorganization no longer

161. Because secured creditors must be paid before a judge can confirm a reorganization plan, *see supra* note 151 and accompanying text, shareholders of an insolvent debtor are unlikely to receive any recovery. But shareholders may well receive some recovery in a Chapter 11 reorganization in order to induce them to agree to a consensual plan. *See* Schwarcz, *Basics of Business*, *supra* note 124, at 86.

162. The creditors would be harmed because the secured financing is assumed to be futile. If instead the liquidity provided by the secured financing makes the debtor's bankruptcy unlikely, this Article argues that the secured financing would *benefit* creditors.

163. Indeed, I have observed these principles in practice. White Motor Corporation (WM), for example, was a troubled company whose unsecured bank loans were maturing. WM did not have the liquidity to repay the banks. The banks offered to extend their loans for a year if WM would secure them. WM, however, decided to file a petition for reorganization under Chapter 11 rather than securing the banks. *See In re White Motor Credit Corp.*, 18 B.R. 720 (Bankr. N.D. Ohio 1980). WM had no confidence that it could repay the loans at the end of the subsequent year and therefore preferred to reorganize without the burden of having encumbered its assets.

164. Susan Rose-Ackerman, *Risk Taking and Ruin: Bankruptcy and Investment Choice*, 20 J. LEGAL STUD. 277, 294 (1991) (quoting KENNETH R. MACCRIMMON & DONALD A. WEHRUNG, WITH W.T. STANBURY, *TAKING RISKS: THE MANAGEMENT OF UNCERTAINTY* 195 (1986)); *see also* ROBERT H. FRANK, *MICROECONOMICS AND BEHAVIOR* xxii (2d ed. 1994) (“[R]ecent research show[s] that people often systematically violate the prescriptions of the rational choice model.”); RICHARD H. THALER, *QUASI RATIONAL ECONOMICS* xxi (1991) (arguing that economics should try to take into account the irrationality of human behavior); Steven L. Schwarcz, *A Fundamental Inquiry into the Statutory Rulemaking Process of Private Legislatures*, 29 GA. L. REV. 909, 988 n.278 (1995) (“[L]aw and economic predictions of human behavior may benefit by taking psychology into account.”).

bears the stigma it once did, and it increasingly is regarded as an innovative approach to troublesome financial problems. As Professor Warren and a co-author have noted, "[b]ankruptcy has lost some of its once overwhelming association with failure":

Respectability was a by-product of some highly publicized success stories, such as the reorganization of TOYS "R" US, which took the business from the brink of disaster to a fast-growing, highly visible business whose stock was heavily traded and rose rapidly when the turnaround began. In the past few years, well known and respected companies—such as Texaco, LTV Steel, Wickes Lumber, Zales Jewelers, and Macy's Department Stores—went into bankruptcy and came out whole. . . . [Managers] saw these companies continue to function throughout the reorganization, without overt change, or with enhanced operations and improvements in their competitive positions. . . .

. . . .

These and other factors have combined to make Chapter 11 a more attractive possibility where the powerful provisions of the Bankruptcy Code might solve serious legal problems. The once disreputable "bully boy" of bankruptcy is becoming the "innovative approach"¹⁶⁵

A firm's managers are therefore unlikely to view Chapter 11 as presenting the threat of ruin. Without empirical evidence to the contrary, one should not assume that undervaluing will be systematic or that unrealistic optimism will prevail over rationality in a significant number of cases.¹⁶⁶

E. Explaining the Anomaly of Non-Recourse Debt

The previous discussion argued that debtors generally will not incur secured debt until they need liquidity and cannot obtain unsecured financing. Non-recourse debt, however, is a well-known exception to that rule. In the present context, "non-recourse" means that the obligation to repay borrowed money is secured by specific assets of the debtor, but the creditor does not have general recourse to the

165. ELIZABETH WARREN & JAY LAWRENCE WESTBROOK, *THE LAW OF DEBTORS AND CREDITORS* 830-31 (3d ed. 1996).

166. Even Professor Rose-Ackerman acknowledges a trend toward rationality. See Rose-Ackerman, *supra* note 164, at 303 ("[T]he less painful Chapter 11 is for managers, the more likely they are to select the overall value-maximizing project . . .").

debtor's remaining assets.¹⁶⁷ Non-recourse debt can include project financing, securitization, and other forms of "structured finance" transactions.¹⁶⁸ For example, a \$1,000,000 loan to build a project would be non-recourse if the lender is secured by a lien on the project but has no other claim against the debtor or its assets. The secured creditor therefore may look only to the project for repayment. Non-recourse debt is valuable because it allows a debtor to obtain off-balance sheet financing and may enable the debtor to achieve financing at a lower cost.¹⁶⁹

The widespread use of non-recourse debt is not inconsistent with the thesis of this Article. In fact, θ , which describes costs incurred by a debtor in pledging its assets, helps to explain why debtors will sometimes choose non-recourse debt over unsecured financing. Consider each of θ 's three components. The first is the opportunity cost of having assets available to pledge as collateral if the debtor subsequently faces a liquidity crisis. Non-recourse financing is not particularly troublesome in this regard because it only encumbers a specific portion of the debtor's assets, such as a pool of financial assets in the case of securitization, or one of a utility's powerplants in the case of project finance. The debtor therefore has all of its remaining assets to pledge as collateral if it later needs liquidity. The second component of θ is the reputational cost of encumbering the debtor's assets. This cost is low, and perhaps non-existent, for non-recourse financing, which is widely recognized by the financial community as an attractive way for healthy companies to raise funds.¹⁷⁰ Creditors are also unconcerned, precisely because the creditor making the non-recourse loan does not have access to any of the debtor's other assets. The third component of θ is the opportunity cost of obtaining financing on a cash flow (as opposed to liquidation) basis. This cost is low because of the nature of the assets that qualify for non-recourse financing in the first place: A creditor financing non-recourse debt

167. More generally, non-recourse debt is "[d]ebt secured by the property that it is used to purchase." BLACK'S LAW DICTIONARY 1057 (6th ed. 1990). "The purchaser of the property is not personally liable for the debt upon default. Rather, the creditor's recourse is to repossess the related property." *Id.*

168. Thus, non-recourse debt normally occurs in the context of advancing new money.

169. See Schwarcz, *Alchemy*, *supra* note 20, at 136-37, 142-43.

170. The Securities and Exchange Commission, for example, has acknowledged that securitization, a form of non-recourse financing, is "becoming one of the dominant means of capital formation in the United States." Exclusion from the Definition of Investment Company for Structured Financings, Investment Company Act Release No. 19,105, 57 Fed. Reg. 56,248, 56,248 (Nov. 27, 1992).

cannot look to the debtor for cash flow; it therefore only finances assets that generate cash flow. In securitization, for example, the financial assets themselves turn into cash. In project financing, the project's operation and related supply contracts generate the cash flow. Because the costs comprising θ are all minimal, a debtor has little incentive to avoid non-recourse debt.

On the other hand, a debtor may have an economic incentive to incur non-recourse debt. A properly structured non-recourse financing may enable the debtor to access low cost capital market funds.¹⁷¹ In contrast, the interest rate savings achieved by borrowing on a secured, as opposed to unsecured, basis is small and often may not exist.¹⁷²

Unsecured creditors should not be troubled that debtors sometimes incur non-recourse debt when they could have borrowed on an unsecured basis. Non-recourse debt does not generally reduce the expected value of unsecured claims.¹⁷³ To understand why, return again to our hypothetical debtor with \$1 million of unsecured claims and \$1 million of assets. If its chance of liquidation is 5% and the liquidation value of its assets is 50% of their book value, the expected value of the unsecured claims is \$975,000.¹⁷⁴ If, however, the debtor borrows an additional \$1 million of new money on a non-recourse basis to construct a project, the expected value of the unsecured claims still is equal to $(0.05 \times \$500,000) + (0.95 \times \$1,000,000)$, or \$975,000.¹⁷⁵

171. Cf. Schwarcz, *Alchemy*, *supra* note 20, at 137. For example, "the capital markets [are] prepared to fund [non-recourse] securitization transactions at a lower rate than secured financing . . . [because] a bankruptcy of the [debtor] would not adversely affect the ability of investors to receive payment on their asset-backed securities." *Id.* at 150-51. Therefore the imperfections associated with bankruptcy would not occur. Even if the debtor obtains bank financing, the rate may be lower than for a standard loan because the lender can more easily assess the risk of repayment from the asset. See *id.* at 145-46; Interview with Arnold Ziegel, *supra* note 62.

172. See *supra* notes 100-01 and accompanying text. The minimal interest rate savings explains why one cannot persuasively argue that secured credit is efficient simply because a "firm with lower credit costs is . . . wealthier than an identical firm with higher credit costs." Shupack, *supra* note 1, at 1112. On the other hand, non-recourse financing, by accessing low-cost capital market funding, can make a debtor wealthier by significantly reducing interest cost. Because non-recourse debt does not generally reduce the expected value of unsecured claims, the wealth is created without taking value from third parties.

173. For a discussion of why non-recourse debt may not harm unsecured creditors, see Schwarcz, *Alchemy*, *supra* note 20, at 146-51.

174. $\$975,000 = (0.05 \times \$500,000) + (0.95 \times \$1,000,000)$. See *supra* p. 441.

175. This calculation assumes that non-recourse debt does not affect the debtor's chance of bankruptcy and also that the debtor puts no equity into the project. The debtor, however, may need to put some amount of equity into a project to persuade the lender that the debtor be-

The reason the expected value of the unsecured claims does not change is that the unsecured creditors continue to have a claim against the original \$1 million of assets, undiluted by the non-recourse secured claim, and the non-recourse secured creditor takes the risk of the 50% liquidation value of the project assets.¹⁷⁶ Because non-recourse debt creates no significant externalities, this Article's conclusion that new money liens should not be regulated is even more compelling in the context of non-recourse debt.

F. Full Priority Secured Credit Maximizes the Expected Value of Unsecured Claims

I argued earlier that secured credit is a source of needed liquidity to debtors that are unable to borrow unsecured.¹⁷⁷ I then argued that such liquidity reduces the chance of debtor bankruptcy, which in turn increases the expected value of the debtor's unsecured claims.¹⁷⁸ I now want to consider whether these theoretical arguments are consistent with the available empirical evidence. In so doing, I will suggest that the expected value of a debtor's unsecured claims are greater under the existing full priority rule than they would be under a partial priority rule.

lieves in the project's viability and also to provide some additional collateral support—lenders usually require the collateral value to exceed the loan amount by some margin. See Christopher R. Schraff, *Urban Redevelopment, Environmental Liabilities for Lenders and the Cleanup of Contaminated Property – A Reply to Samuel Staley*, 25 CAP. U. L. REV. 77, 77 n.2 (1996) ("In a carefully handled secured loan transaction, collateral values will exceed loan balances so that the lender never loses the option of liquidating collateral, where necessary, to recover the unpaid principal and interest owed by the defaulting borrower."); Nancy R. Selbst, "Unregulation" and Broadcast Financing: New Ways for the Federal Communications Commission to Serve the Public Interest, 58 U. CHI. L. REV. 1423, 1438 (1991) ("Lenders like to hold collateral equal to or greater than the value of the loan."). If the debtor were to put some equity into the project, it would slightly reduce the expected value of the unsecured claims; however, the reduction would generally be too small to be significant. For example, say the debtor puts \$100,000, or 10%, of equity into the project. The expected value of the unsecured claims would reduce to $(0.05 \times 0.5 \times \$900,000) + (0.95 \times \$1,000,000) = \$972,500$, a reduction of only about 1/5th of 1%. In comparison, ordinary secured debt reduced the expected value of unsecured claims to \$950,000, a reduction of over 2.5%. See *supra* p. 441.

176. Even if the debt provided full recourse against the debtor, the effect on unsecured creditors would not be as bad as if the secured creditor were secured by *all* of the debtor's assets. If, in the foregoing example, the collateral is insufficient to pay the secured creditor's claims, the secured creditor would have an unsecured claim for the deficiency. See 11 U.S.C. § 506(a) (1994). That unsecured deficiency claim would be *pari passu*, and would not have priority over general unsecured claims. Cf. *id.* § 506(b).

177. See *supra* Part III.A.

178. See *id.*

It is, of course, impossible to “prove” the thesis of this Article through empirical evidence or quantitative analysis, in part because no partial priority rule exists as a basis for comparison.¹⁷⁹ Furthermore, any quantitative analysis is no better than its assumptions, which are inherently speculative in the absence of supporting empirical data.

Ultimately, therefore, this Article relies on the intuitive plausibility of its central argument: That the availability of full priority secured credit will benefit unsecured creditors if the liquidity it creates reduces the probability of bankruptcy sufficiently more than the decreased recovery by unsecured creditors should bankruptcy occur.¹⁸⁰ Likewise, a partial priority rule will harm unsecured creditors more than a full priority rule if partial priority reduces liquidity and hence increases the probability of bankruptcy sufficiently more than the increased recovery to unsecured creditors should bankruptcy occur.¹⁸¹ The following discussion is merely an attempt to illustrate how these arguments are likely to be resolved. The first part of the discussion examines what empirical evidence may be relevant to these arguments; the second part suggests how a quantitative analysis may be applied to them.

1. *Observing Creditor Responses.* One way to determine whether secured credit transfers value from unsecured creditors is to observe the behavior of future unsecured creditors—that is, to observe how different types of unsecured claimants respond when a debtor pledges its assets as collateral for new secured credit.¹⁸² I will

179. I do not suggest that a partial priority rule be adopted as an experiment to generate data; the potential for disrupting the credit markets is too great.

180. In bankruptcy, the unsecured creditors would recover less due to the higher priority claim of the secured creditors.

181. In bankruptcy, the unsecured creditors would recover more under a partial priority rule than under a full priority rule because a portion of the collateral would be set aside for the benefit of unsecured creditors.

182. I also considered observing how a rating agency's rating of a debtor's long-term, unsecured debt changes after the debtor obtains secured credit. This test, however, did not turn out to be meaningful. Debtors that need to secure their assets to obtain liquidity often are unrated; and even if rated, they tend to be rated in speculative categories. Telephone Interview with Joanne W. Rose, Senior Managing Director, General Counsel and Chair of the Ratings Policy Board, Standard & Poor's Ratings Services (Dec. 9, 1996) (explaining why ratings would not be a valid empirical test and describing Standard & Poor's rating methodology) (interview notes on file with author). Furthermore, under the rating methodology used until recently, only a debtor's most senior body of debt was allowed the highest rating for that debtor. *Id.* Therefore when a debtor with unsecured debt obtained secured credit, any increase in the unsecured debt

focus here on the responses of trade creditors and shareholders (i.e., residual claimants) and, to a more limited extent, public bondholders.¹⁸³ Although such empirical observation does not allow a direct comparison between a full and a partial priority rule, it provides some evidence for a more limited proposition: that a full priority rule is likely to benefit unsecured claimants.

This proposition can be indirectly tested in two ways. The first indirect test (the “stock test”) is to examine the change in stock market prices of troubled companies that announce they have obtained secured credit. A drop in stock price suggests that investors believe the increased debt will merely reduce the equity of a company doomed to failure. On the other hand, an increase in the stock prices suggests that investors believe the liquidity provided by the secured credit will enable the company to succeed.

Consider a real world example. Charming Shoppes Inc. is a women’s specialty apparel chain that, since October 1995, was having financial problems.¹⁸⁴ In early December of that year, it avoided bankruptcy by obtaining a \$157 million secured line of credit from Congress Financial Corporation.¹⁸⁵ After the company obtained the secured credit, the price of Charming Shoppes’ shares “rose 37.5 cents, or 16%, to \$2.688 apiece in Nasdaq Stock Market trading.”¹⁸⁶

The case of Charming Shoppes is illustrative of the empirical data, which I generated¹⁸⁷ using the following methodology. By randomly examining numerous announcements published during the past several years in the *Wall Street Journal*,¹⁸⁸ I was able to locate

rating resulting from enhanced liquidity could be offset by the unsecured debt no longer being allowed the highest rating. *Id.* However, this rating approach is now viewed as “unrealistic” and “overly conservative,” and is being revised to rate debt solely based on the creditor’s ultimate likelihood of recovery. *Id.* Unfortunately, ratings under this revised approach have not yet been assigned, and therefore comparative data are unavailable. *Id.*; accord Telephone Interview with Petrina R. Dawson, Managing Director and Associate General Counsel, Standard & Poor’s Ratings Services (Dec. 10, 1996) (confirming text of this footnote) (interview notes on file with author).

183. Future unsecured creditors (other than trade creditors) are not included because the secured credit itself provides the debtor’s long-term liquidity. See *supra* Part III.A. Future involuntary creditors (such as tort creditors) also are not included because the involuntary nature of their claims makes a response irrelevant.

184. See *Charming Gets Credit Line*, WALL ST. J., Dec. 4, 1995, available in 1995 WL-WSJ 9910347.

185. The line of credit was secured by all of Charming Shoppes’ inventory. See *id.*

186. *Id.*

187. With the able assistance of Adam H. Chodos.

188. The announcements covered the period of January 1989 through January 1997.

only 20 stating that a company had obtained secured credit but excluding extraneous factors, such as profits or losses, that might affect stock price. I then examined the stock price of each of these companies for at least a week prior to, and the week after, the announcement.¹⁸⁹ Fourteen of the 20 companies showed significant price increases,¹⁹⁰ and one showed a slowed rate of price fall, after the announcement.¹⁹¹ Three companies showed little or no price change. Only two of the companies showed a small price decrease.¹⁹² The average price change for *all* these companies, adjusting for the effect of market performance,¹⁹³ was a 5.0% increase in stock price within 24 hours of the announcement and a 10.3% increase within the week¹⁹⁴ after the announcement. These data indicate that investors in the stock market generally believe that full priority secured credit benefits shareholders.¹⁹⁵

189. Chodos and I examined the stock price for six months prior to the announcement in order to assess the price trend and to determine how the announcement affected the *rate* of price change. If, for example, a company's stock price was falling sharply prior to the announcement and the rate of fall slowed after the announcement, the stock market arguably would have reacted positively to the secured credit. But if the rate of a company's increase in stock price slowed after the announcement, the stock market arguably would have reacted negatively even though the stock price continued to increase.

190. Following the announcement, the average market-adjusted increase in stock price was 5.4% for the day, and 12.6% for the week.

191. The raw data are on file with the author.

192. The average market-adjusted stock price decrease was 1.7% for the day, and 3.4% for the week, following the announcement.

193. That is, the stock price change of each company was adjusted to exclude the effect of general stock market conditions during the applicable period of the price change. That adjustment typically was about one-tenth of one percent.

194. Because information is not immediately reflected in stock price, we believe that the price change for the week following the announcement is a more accurate indicator than the price change for the day following the announcement as to the effect the credit announcement had on the value of the debtor's shares.

195. John E. Galvin, retired Treasurer of IMC Global, explained that even secured credit is seen by equity investors as beneficial because lack of liquidity is the biggest problem a company faces. Telephone Interview with John E. Galvin (Dec. 5, 1996) (interview notes on file with author); see also *Orovitz v. Schilling*, No. 94-6751, 1995 U.S. Dist. LEXIS 5596 (E.D. Pa. Apr. 25, 1995). The *Orovitz* case involved the InterDigital Communications Corporation, an "embattled wireless communications company" which, according to a class action complaint, issued a statement in March 1994 that it had obtained a "committed" secured borrowing arrangement. *Id.* at *1. However, the borrowing arrangement subsequently fell apart. See *id.* The plaintiff asserted that if he "had been aware of the true financial situation, he would not have bought the . . . stock." *Id.* The complaint further alleged that positive news about the financing arrangements inflated the stock price and affected investors' decisions to buy the stock, and the failed deals caused the price of the stock to fall. See Jessica Davis, *Illinois Businessman Becomes Third InterDigital CEO in Year*, PHILA. BUS. J., Nov. 25, 1994, § 1, at 6.

The stock test is admittedly imperfect. Shareholders of a troubled company could have little to lose and much to gain if the company engages in risky ventures, such as incurring levels of secured credit that might dramatically increase equity while creating a high risk of failure.¹⁹⁶ Equity investors therefore may value the stock of a troubled company more highly after the venture. Some investors also may react positively to the news that secured credit has been granted because they believe it reflects a positive assessment of the firm's status by the new lender—perhaps the lender knows something good about the firm that the equity investors may not know. Although arguments may be made that the stock test is compelling,¹⁹⁷ I recognize that the test may only have persuasive value. To provide further support for my argument, I therefore performed a bond test using a methodology similar to that used for the stock test.¹⁹⁸ The data from the bond test suggest that bondholders also believe that they will benefit from full priority secured credit.¹⁹⁹

Another way to indirectly test the proposition that a full priority rule benefits unsecured creditors is to examine the change in the terms of unsecured trade credit offered by suppliers to troubled com-

196. Cf. Schwarcz, *Rethinking Corporate Obligations*, *supra* note 48, at 669 (discussing how shareholders of marginally insolvent companies view risky business ventures).

197. For example, Jesse Fried has stated that the "problems [he and Bebchuk] identify would arise even if all of the nonadjusting creditors were sophisticated lenders In such a case, the efficiency costs [they] identify would be borne by the *equityholders*" Letter from Jesse M. Fried to the author, at 1 (Oct. 11, 1996) (emphasis added) (on file with author). Using that analysis, the stock test would appear to directly refute Bebchuk and Fried's argument.

198. In addition to the companies used in the stock test, Adam Chodos and I identified every company which since January 1, 1990 was mentioned in the *Wall Street Journal* or other major U.S. newspapers as having announced that it had obtained secured credit. We then narrowed the announcements to those that did not include other factors that might affect bond prices. We then attempted to examine each company's public bond prices for at least a week prior to and the week after the announcement. Unfortunately, even using all of the available data services—Datastream, Bloomberg, Lexis, Dow Jones News Retrieval Service, Westlaw, Moody's, Standard & Poor's, the *Wall Street Journal*, and the Internet—we were able to locate bond data for only ten of these companies. We were unable to obtain bond data for more of these companies for three reasons. First, some of these companies did not have bonds outstanding during the relevant period. Second, most of the bond price information services limit their archived data to bonds rated investment grade or better (the ratings on bonds of the companies that formed our sample generally were not investment grade, suggesting, of course, that secured credit is more likely to be associated with less-than-investment grade companies, as predicted by our model). Third, bond price data are generally available only on a month-end rather than a daily basis.

199. The average price change for the bonds of these ten companies, adjusting for the effect of general corporate bond market performance, was a 0.3% increase in bond price within 24 hours of the announcement and a 0.6% increase a week after the announcement.

panies after such companies obtain secured credit (the "trade credit test"). If such terms become more onerous it suggests that trade creditors believe the companies are likely to fail anyway and that the increased debt therefore will harm the trade creditors. But if such terms become less onerous, it suggests that trade creditors believe the liquidity provided by the secured credit will enable the companies to continue to operate profitably, at least in the short run.

In fact, the experience of leading bankruptcy attorneys suggests that, in these circumstances, the terms of unsecured trade credit generally become *less* onerous:

Prior to a troubled debtor's obtaining long-term credit, trade creditors typically ship goods on a COD [cash on delivery] or CBD [cash before delivery] basis. Once there is long-term credit, the trade will loosen up their own credit. That the debtor has encumbered all its assets is not important. They [the trade creditors] just want to get paid when they ship the goods [and they expect to be paid if] the long-term credit is viewed [by the trade creditors] as sufficient. In most cases, [it] definitely is true [that long-term credit is viewed as sufficient].²⁰⁰

Trade creditors are willing to presume that liquidity provided by secured credit will enable companies to succeed, at least in the short run.

The trade credit test may be imperfect because a trade creditor might only be concerned with whether the secured credit will be sufficient to repay the trade creditor in 30, 60, or 90 days, the terms of the trade credit.²⁰¹ However, this imperfection can be minimized by examining how trade creditors respond to debtors that obtain long-term secured credit under the Bankruptcy Code.²⁰² It is common-

200. Telephone Interview with Edmund M. Emrich, Bankruptcy Partner at Kaye, Scholer, Fierman, Hays & Handler (Dec. 5, 1996) (interview notes on file with author); *accord* Telephone Interview with Peter V. Pantaleo, Bankruptcy Partner at O'Melveny & Myers (Dec. 6, 1996) (stating that working capital financing, whether secured or not, significantly increases a debtor's chance of getting trade credit) (interview notes on file with author); Telephone Interview with John E. Galvin, *supra* note 195 (noting that once a debtor solves its liquidity problem, trade creditors back off from demanding stringent trade terms, although they do keep a close eye on the company) (interview notes on file with author).

201. One also cannot exclude the possibility, however unlikely, that trade creditors may react positively to news that a company has obtained secured credit because they believe the lender knows something good about the company that the trade creditors may not know.

202. See 11 U.S.C. § 364 (1994) (postpetition credit). In bankruptcy, a Chapter 11 debtor may usually operate its business while attempting to reorganize. See *id.* § 1108.

place²⁰³ for suppliers to companies that become bankrupt to withdraw trade credit until such companies enter into postpetition credit agreements with third parties, such as banks or finance companies.²⁰⁴ However, once third-party credit is arranged, suppliers customarily re-extend trade credit to the postpetition debtor.²⁰⁵ These third-party credit agreements are good approximations of full priority secured credit because they invariably grant the lender, with bankruptcy court approval, full priority over the suppliers in the event the debtor's assets are insufficient to satisfy claims in full.²⁰⁶ Suppliers typically are willing to re-establish trade terms because they believe that the liquidity provided by the credit agreement will enable the debtor to reorganize in bankruptcy (reorganization being analogous to a troubled company succeeding) and avoid liquidation (liquidation being analogous to the failure of a troubled company).²⁰⁷

203. Telephone Interview with Edmund M. Emrich, *supra* note 200.

204. *Id.*

205. A good illustration is the Caldor Corporation bankruptcy. See *In re Caldor, Inc.*, 193 B.R. 182 (Bankr. S.D.N.Y. 1996). Caldor had filed a bankruptcy petition because it had no source of long-term credit and therefore trade creditors were not extending credit terms. Telephone Interview with Edmund M. Emrich, *supra* note 200. However, once Caldor obtained long-term credit in the form of debtor-in-possession (DIP) financing, its trade creditors generally began extending 30-day trade terms. *Id.* Mr. Emrich, who is counsel for Caldor in its bankruptcy case, says this scenario is "typical." *Id.* Scott L. Hazan, a leading attorney for trade creditors who specializes in representing unsecured trade creditors of troubled and bankrupt companies, agrees that this scenario is a "fair generalization" of the pattern of trade credit, although he notes that sometimes large trade creditors who dominate a narrow industry may attempt to obtain protection of their postpetition trade credit on the same terms obtained by the DIP lender. Telephone Interview with Scott L. Hazan, Bankruptcy Partner at Otterbourg, Steindler, Houston & Rosen (Dec. 6, 1996) (interview notes on file with author).

206. DIP financing is provided by a lender either on a secured or a "superpriority" (that is, a priority over administrative expenses) basis to a postpetition debtor. See 11 U.S.C. § 364(c). Therefore the lender is virtually always senior in priority to suppliers, who typically extend trade credit in the ordinary course of the debtor's business as an administrative expense. See *id.* §§ 364(a), 507(a)(1), 503(b).

207. Telephone Interview with Edmund M. Emrich, *supra* note 200. Contributors to a recent PLI Commercial Law and Practice Course Handbook make a similar point:

[A] DIP's success in obtaining a commitment for financing, secured by the DIP's unencumbered inventory, demonstrates that both the DIP and the lender have faith in the DIP's ability to reorganize and emerge successfully from chapter 11. As a result, trade creditors may be more willing to extend trade credit on normal terms to chapter 11 retailers.

Robin E. Phelan et al., *Extending Credit to a DIP: The Second Face of the Devil*, in REPRESENTING THE TRADE CREDITOR AND LANDLORD IN CHAPTER 11 CASES 247-48 (PLI Commercial Law and Practice Course Handbook Series, No. 632, 1992); see also Brian White, *Extended Financing Eases Plaid Pressures*, BUS. J. PORTLAND, Jan. 8, 1990, § 1, at 1 (discussing Plaid Pantry's use of DIP financing to shift from cash on delivery and advanced-payment basis to "normal" trade credit terms).

2. *Quantitative Analysis.* Because the foregoing empirical tests are both indirect and potentially imperfect, they cannot be dispositive of the arguments advanced in this Article. Accordingly, I next examine the feasibility of these arguments by using a quantitative analysis based on what I believe to be a set of reasonable assumptions.

This analysis focuses on the expected value of unsecured claims (denoted hereinafter by the symbol “ EV_u ”) under several different sets of contingencies. If the debtor does *not* borrow new money, the expected value of unsecured claims can be intuitively conceptualized as the likelihood of bankruptcy absent the borrowing multiplied by the asset value in bankruptcy, plus the likelihood of avoiding bankruptcy absent the borrowing multiplied by the amount of the unsecured claims.²⁰⁸ If, on the other hand, the debtor *does* borrow new money, the expected value of unsecured claims can be conceptualized as the likelihood of bankruptcy with the increased liquidity resulting from the borrowing multiplied by the value of unsecured claims after secured claims are paid in full, plus the likelihood of avoiding bankruptcy with the liquidity resulting from the borrowing multiplied by the amount of unsecured claims.²⁰⁹

Bebchuk and Fried used a similar “expected value” analysis to argue that a full priority rule *harms* unsecured creditors. They performed their expected value analysis from the standpoint of a debtor that borrows at an arbitrary time when its risk of bankruptcy is 5%.²¹⁰ I have already argued, however, that a rational debtor would not prematurely encumber its assets at an arbitrary time.²¹¹ Rather, a debtor has an economic incentive to borrow on a secured basis *only* when it needs liquidity and cannot borrow unsecured.²¹² Because the timing of the borrowing is not arbitrary, the assumption of a 5% bankruptcy risk at the actual time of borrowing appears to be too low.

208. I am assuming in the first part of this equation that unsecured claims will be paid solely from the asset value in bankruptcy, and am assuming in the second part of the equation that unsecured claims will be paid in full if bankruptcy is avoided.

209. In the first part of the equation I am assuming under my model that all asset value will be used in bankruptcy to repay the secured claim, leaving nothing to repay the unsecured claims. In the second part of the equation, I am again assuming that unsecured claims will be paid in full if the debtor avoids bankruptcy.

210. See Bebhuk & Fried, *supra* note 1, at 873.

211. See *supra* Part III.B.

212. See *id.*

The expected value analysis should be made at the time the debtor actually would borrow on a secured basis—that is, when it needs liquidity. A debtor facing a liquidity crisis may be constrained to choose between secured borrowing or filing a petition for Chapter 11 reorganization.²¹³ In these circumstances, it is reasonable to assume that if the debtor fails to borrow, its risk of bankruptcy will be quite high. I estimate that risk conservatively at 60 to 90%. Furthermore, a rational debtor would be reluctant to borrow on a secured basis, even assuming someone is willing to lend, *unless* the borrowing would reduce its risk of bankruptcy to close to zero. However, I will again proceed conservatively, and estimate that the debtor has a 5 to 20% probability of going bankrupt.²¹⁴

With these assumptions in mind, let us return again to our hypothetical debtor to calculate the expected value of its unsecured claims. Recall that the debtor has \$1 million of unsecured claims, \$1 million of assets, and an asset liquidation value equal to 50% of fair market value.²¹⁵ The debtor is considering borrowing \$1 million of new money on a secured basis.²¹⁶ Let

- α = the debtor's likelihood of bankruptcy;
- V = value of the debtor's assets prior to liquidation;
- S = amount of the secured claims;
- U = amount of the unsecured claims; and
- γ = percentage by which asset value deteriorates during liquidation.

The expected value of unsecured claims can then be calculated according to the following equation:

213. See *supra* notes 122-24 and accompanying text.

214. I assume that the risk of bankruptcy, even after borrowing, is not reduced to zero. If it were, then presumably the debtor could have persuaded lenders to advance funds on an unsecured basis.

215. An asset liquidation value of 50% appears to be conservative. See TIMOTHY W. KOCH, BANK MANAGEMENT 647 (3d ed. 1995) (stating that banks making loans secured by receivables generally assume 50 to 80% foreclosure values, and that banks making loans secured by raw materials generally assume 40 to 60% foreclosure values); *Texas Default Study Confirms Loan-Loss Assumptions*, STANDARD & POOR'S STRUCTURED FIN., Feb. 1993, at 1, 5 (finding in an empirical study of mortgage foreclosures in Texas in the early 1980s that the average loss of value in foreclosure was less than 40%).

216. This fact pattern of a debtor with \$1 million of assets needing \$1 million of new money for liquidity is intended to be conservative. Indeed, it is most likely the case that debtors need only a fraction of their asset value for liquidity. The lower the amount of new money required for liquidity, the higher the expected value of the debtor's unsecured creditor claims because, in the unlikely event of the debtor's bankruptcy, any collateral value not needed to repay the new money secured claim would become available to repay unsecured claims.

$$EV_u = [\alpha \times (\gamma \times V)] + [(1 - \alpha) \times U].$$

For the purposes of our hypothetical, $V = \$1,000,000$; $U = \$1,000,000$; and $\gamma = .50$. Assume further that if the debtor does *not* borrow its risk of bankruptcy is 85% (that is, $\alpha = .85$), and if it *does* borrow that risk is reduced to 10% (that is, $\alpha = .10$). The expected value of unsecured claims can then be calculated for both scenarios. If the debtor does not borrow, then:

$$EV_u = [0.85 \times (.50 \times \$1,000,000)] + [0.15 \times \$1,000,000] = \$575,000.$$

On the other hand, if the debtor *does* borrow on a secured basis, then:

$$EV_u = [0.10 \times 0]^{217} + [0.90 \times \$1,000,000] = \$900,000.$$

This large difference in the expected value of unsecured claims again illustrates that allowing debtors to have access to secured credit can benefit their unsecured creditors.

Of course, the results of this quantitative analysis depend on the assumptions with which we begin. But the results would be the same even if one were to use the conservative end of the range of assumptions.²¹⁸ Assume that the debtor's risk of bankruptcy if it does not borrow is only 60%, which reduces to merely 20% if the debtor does borrow. Even in these circumstances, the debtor's access to secured credit *still* would increase the expected value of its creditors' unsecured claims.²¹⁹

217. The zero in this equation reflects that even if the debtor were to borrow \$1 million of additional funds on a secured basis, there is still a 10% risk of debtor failure. If the debtor were to fail, the \$1 million secured claim would have priority against the \$2 million of debtor assets resulting from the original \$1 million plus the additional borrowed \$1 million. However, at a 50% liquidation value, the \$2 million of debtor assets would yield only \$1 million of value, and that value would be used up paying the \$1 million secured claim.

218. The most conservative end of the range of these assumptions is where the debtor is least likely to go bankrupt before incurring secured debt and is most likely to go bankrupt after incurring secured debt. Therefore, the liquidity provided by the secured debt is least advantageous. Furthermore, the high residual bankruptcy risk makes it most likely that a subsequent bankruptcy will occur in which the secured creditor will assert its priority over unsecured creditors.

219. If the debtor does not borrow, $EV_u = (0.60 \times \$500,000) + (0.40 \times \$1,000,000) = \$700,000$. If the debtor does borrow, $EV_u = (0.20 \times 0) + (0.80 \times \$1,000,000) = \$800,000$. Allowing the debtor to borrow therefore increases the expected value of its unsecured claims by \$100,000 even in this highly conservative example.

3. *Comparing Full and Partial Priority.* The foregoing analysis suggests that the expected value of unsecured claims is higher when the debtor borrows from secured creditors than it would be if the debtor could not borrow and had to file for bankruptcy. The more interesting question, however, is whether the expected value of unsecured claims is greater under a full priority rule or a partial priority rule. A partial priority rule increases the bankruptcy recovery to unsecured creditors, but decreases the overall availability of secured credit. A partial priority rule therefore creates competing tendencies both to increase and decrease the expected value of unsecured claims. The net impact of a partial priority rule on the expected value of unsecured claims therefore depends on the relative magnitude of these competing effects.

Estimating the amount of the partial priority is relatively easy. Bebchuk and Fried suggested a 75% partial priority rule,²²⁰ which appears to be a representative number.²²¹ Under their partial priority rule, “a fixed fraction of a secured creditor’s claim would continue to be treated as a secured claim, and the remainder would be treated as an unsecured claim.”²²² Thus, under a 75% partial priority rule,²²³ 75% of a secured claim would be given full priority over unsecured claims, and the remaining 25% would become an unsecured claim.

It is more difficult to estimate the willingness of lenders to advance funds which are only partially secured. Partial priority is risky to secured lenders because it would render 25% of their claims unsecured in circumstances where I have assumed there is a 5 to 20% residual risk of debtor bankruptcy.²²⁴ In assessing the willingness of a lender to advance partially secured funds, it is important to recognize that the lender has no obligation to advance such funds. A lender will do so only if it believes that making the loan is in its economic self-interest. It is difficult to imagine what that self-interest might be,²²⁵

220. See Bebchuk & Fried, *supra* note 1, at 909.

221. Professor Warren has similarly suggested that 80% of a secured claim be given priority over unsecured claims. See Warren Proposal, *supra* note 3, at 1.

222. Bebchuk & Fried, *supra* note 1, at 909.

223. Bebchuk and Fried use the term “fixed-fraction” rule. See *id.* at 909.

224. Recall that the debtor’s risk of bankruptcy, even after borrowing, is assumed to be between 5 and 20%. See *supra* text accompanying note 214.

225. Even a higher interest rate may provide insufficient motivation. I have already argued, in a different context, that the only lenders likely to make high risk loans are those that charge very high fees for lending small amounts on a secured basis to a statistically large number of debtors (in much the same way that insurance companies insure policyholders against catastrophic events). See *supra* note 147 and accompanying text. A partial priority rule would

since potential lenders face a risk of loss which is generally not compensated if the debtor succeeds.²²⁶ One therefore would expect that a partial priority rule would cause many potential lenders simply to refuse to make loans to debtors,²²⁷ thereby restricting the availability of secured credit. I will assume that a 75% partial priority rule would cause between 10 and 25% of debtors that need liquidity to be unable to find willing lenders.²²⁸

indeed make any secured loan to a financially distressed borrower a high risk loan, for a portion of what may otherwise be a fully collateralized loan will be converted into an unsecured claim.

Of course, part of a lender's motivation may turn on whether it could find an alternative way to redeploy funds that otherwise would be lent on a secured basis. One secured lending expert I interviewed suggested that a partial priority rule would cause secured lenders to shift their money to other investments, such as high quality unsecured loans, bonds and other investment securities, debt of foreign companies, and receivables and other financial assets. Telephone Interview with Howard Ruda, Financing Partner at Hahn & Hessen LLP (Nov. 22, 1996) (author of a multi-volume treatise on asset-based lending) (interview notes on file with author). Surplus cash also might be applied to repay the lender's own borrowings. *Id.*

226. If the debtor succeeds, the lender is merely entitled to a contractual rate of interest. Any surplus value in the collateral must be returned to the debtor. See U.C.C. §§ 9-502(2), 9-504(2) (1995). Of course, a lender that bargains for convertible debt or warrants can share in any upside potential, but in my experience, these "venture capital" type solutions are rare in lending to ongoing businesses. Perhaps a partial priority rule would cause some lenders to attempt to structure their financings more as speculative investments in the debtor than as loans.

227. Telephone Interview with Peter V. Pantaleo, Bankruptcy Partner at O'Melveny & Myers LLP (Nov. 20, 1996) (interview notes on file with author); Telephone Interview with Howard Ruda, *supra* note 225; Telephone Interview with Edwin E. Smith, Financing Partner at Bingham, Dana & Gould and former Lecturer in Commercial Law, Harvard Law School (Nov. 22, 1996) (interview notes on file with author).

228. This assumption has been corroborated as being reasonable and perhaps even conservative. For example, Kenneth N. Klee, Bankruptcy Partner at Stutman, Treister & Glatt and Acting Professor at UCLA, states that the suggested range "seems reasonable . . . for purposes of debate in the absence of empirical data." Electronic mail from Kenneth N. Klee to the author (Nov. 19, 1996) (on file with author). Mr. Pantaleo states that a 75% partial priority rule would have a "significant chilling effect" on secured credit—reducing the availability of secured credit by no less than 10%. Telephone Interview with Peter V. Pantaleo, *supra* note 232. Mr. Smith believes that a partial priority rule would eliminate traditional secured lending, and that those few willing to lend would view the transaction as a venture capital investment. Telephone Interview with Edwin E. Smith, *supra* note 227; *cf. supra* note 226 (noting that a partial priority rule may cause some lenders to structure their loans to financially distressed debtors as speculative investments). Mr. Ruda believes that the suggested range of 10 to 25% underestimates the actual reduction in liquidity that would result from a 75% partial priority rule. Telephone Interview with Howard Ruda, *supra* note 225. His reasoning is that financial institutions are typically highly leveraged and therefore a "bunching up" of losses could create instability for a given institution. *Id.* Furthermore, lending within financial institutions is accomplished through departmental profit centers for which a small number of losses could wipe out yearly profits and thereby jeopardize the careers of the lending officers. For these reasons, he believes that lending officers are unlikely to make a 75% partial priority loan to a debtor unless they would make an unsecured loan, by itself, to that debtor. *Id.* Of course, one could

Using these assumptions, we can estimate the expected value of a debtor's unsecured claims under a partial priority rule. As in the full priority analysis, I will make two calculations of expected value—the first using values that seem most reasonable, and the second using values that are more conservative.²²⁹ The expected value of unsecured claims under a 75% partial priority rule can be calculated as the probability that the debtor can borrow multiplied by the expected value of unsecured claims if the debtor does borrow, plus the probability that the debtor cannot borrow multiplied by the expected value of unsecured claims if the debtor does not borrow.²³⁰

First I will assume that debtors facing a liquidity crisis can borrow 75% of the time, but will be unable to borrow 25% of the time. If β represents the recovery on the bankrupt debtor's unsecured claims after a partial priority secured borrowing, then when we apply the numbers from our hypothetical we see:

$$EV_u = [0.75 \times ((0.10 \times \beta) + (0.90 \times \$1,000,000))] + [0.25 \times ((0.85 \times \$500,000) + (0.15 \times \$1,000,000))].$$

One can calculate the actual value of β as follows. Under a 75% partial priority rule, 75% of the new lender's \$1,000,000 secured claim (i.e., \$750,000) would be given full priority over unsecured claims and the remaining 25% (i.e., \$250,000) would become an unsecured claim.²³¹ One therefore first applies the \$1 million asset liquidation value²³² to payment of the \$750,000 full priority portion of the secured claim. That leaves \$250,000 of asset liquidation value to pay the remaining unsecured claims. Those unsecured claims now total \$1,250,000: \$1,000,000 of previously existing unsecured claims, plus the \$250,000 of new unsecured claims resulting from the partial

not be certain of the impact without actually imposing a partial priority rule and then measuring its effect on the availability of secured credit.

229. As in the full priority analysis, I will first assume that the debtor's risk of bankruptcy is 85% if it does not borrow and 10% if it does. Then I will use values from the more conservative end of the range, namely a 60% risk of bankruptcy if the debtor does not borrow and a 20% risk if it does. I also assume first that 25% of debtors that need liquidity will be unable to find willing lenders; I then assume that as few as 10% will be unable to find lenders.

230. In other words, $EV_u = (\text{probability that debtor can borrow} \times EV_u \text{ if debtor does borrow}) + (\text{probability that debtor cannot borrow} \times EV_u \text{ if debtor does not borrow})$.

231. See *supra* note 54 (explaining how the 75% partial priority rule would be applied).

232. \$2 million assets x 50% liquidation value.

priority of the secured claim. Thus, $\beta = \$250,000^{233} \times (\$1,000,000^{234} \div \$1,250,000^{235}) = \$200,000$.

Inserting the value of β into the previous equation, the expected value of the unsecured claims under a partial priority rule equals \$833,750—less than the \$900,000 expected value of the unsecured claims under a full priority rule.²³⁶

Now we can do the same analysis using more conservative values. The analysis so far has assumed that a 75% partial priority rule causes a 25% reduction in liquidity. First I will change the reduction in liquidity from 25% to 10%.²³⁷ One still would find, however, that the expected value of unsecured claims is greater under a full priority rule than a partial priority rule.²³⁸ Next, instead of stressing the reduction in liquidity, I will stress the debtor's risk of bankruptcy by assuming it is 60% if the debtor does not borrow and 20% if it does. The result is that both a full priority and a partial priority rule give virtually the same expected value.²³⁹ Indeed, only if one stretches all the assumptions to the limit—assuming a reduction in liquidity of merely 10% and further assuming that the debtor's risk of bankruptcy is as little as 60% if it doesn't borrow and as much as 20% if it does—would one reach the point where a partial priority rule measurably increases the expected value of unsecured claims more than would a full priority rule.²⁴⁰

233. The asset liquidation value remaining available to pay unsecured claims.

234. The amount of existing unsecured claims, excluding the additional unsecured claim resulting from partial priority of the secured claim.

235. The total amount of unsecured claims, including the \$250,000 additional unsecured claim resulting from partial priority of the secured claim.

236. See *supra* p. 474.

237. This change reflects that a 75% partial priority rule is estimated to reduce liquidity between 10-25%. See *supra* notes 225-28 and accompanying text.

238. EV_u under partial priority = $0.90 \times [(0.10 \times \$200,000) + (0.90 \times \$1,000,000)] + 0.10 \times [(0.85 \times \$500,000) + (0.15 \times \$1,000,000)] = \$885,500$. EV_u under full priority for an 85%/10% bankruptcy risk was already shown to be \$900,000. See *supra* p. 474. Therefore, the expected value of unsecured claims under full priority would be greater than under partial priority in this example.

239. Assuming liquidity reduces the risk of bankruptcy from 60% to 20%, one would calculate the expected value as follows: EV_u under partial priority = $0.75 \times [(0.20 \times \$200,000) + (0.80 \times \$1,000,000)] + 0.25 \times [(0.60 \times \$500,000) + (0.40 \times \$1,000,000)] = \$805,000$. EV_u under full priority for a 60%/20% bankruptcy risk already has been shown to be \$800,000, see *supra* note 219, a difference of only about one-half of one percent.

240. Using these assumptions, we would calculate the expected value as follows: Under partial priority, $EV_u = 0.90 \times [(0.20 \times \$200,000) + (0.80 \times \$1,000,000)] + 0.10 \times [(0.60 \times \$500,000) + (0.40 \times \$1,000,000)] = \$826,000$. Under full priority for a 60%/20% bankruptcy risk, EV_u already has been shown to equal \$800,000. See *supra* note 219. Therefore, the expected value of

Of course, stretching all assumptions to the limit is improbable by definition. Therefore, as long as my range of assumptions reasonably anticipates actual behavior, we can conclude that the expected value of unsecured claims will usually be greater under a full priority rule than it would be under a partial priority rule.²⁴¹ Critics may argue that the assumptions made in this Article are not based on empirical data and therefore are arbitrary, and that other assumptions could yield different results.²⁴² But in the absence of empirical data, other assumptions may be no more compelling. Assuming a higher or lower partial priority rule—such as 90% or 50% rather than the 75% suggested by Bebchuk and Fried—also is unlikely to strengthen the arguments in favor of partial priority. A higher rule would minimize the reduction in liquidity at the expense of reducing the amount of unsecured creditor recovery in a bankruptcy; while a lower rule would increase the amount of unsecured creditor recovery in a bankruptcy at the expense of even more drastically limiting liquidity and therefore making bankruptcy more likely. Therefore this Article's argument against a partial priority rule would apply irrespective of the amount of the partial priority.

Even under this Article's most extreme assumptions, the increase in expected value of a partial priority rule over a full priority rule is insignificant.²⁴³ Indeed, even if other assumptions were found to be more compelling, one might consider whether advocates of a partial priority rule still should have the burden of demonstrating that the expected value of unsecured claims under partial priority would significantly exceed their expected value under full priority. Overcoming such a burden may well be an appropriate condition to

the unsecured claims under partial priority would be greater than under full priority in this fully "stressed" example.

241. Absolute precision would require that the foregoing computations be adjusted to take into account any additional recovery by unsecured creditors from debtors that are able to reorganize in Chapter 11 and thereby avoid liquidation. Such an adjustment would be difficult to quantify in advance, however, the adjustment would not change the overall conclusions because it is *de minimus* in amount.

242. For example, the benefits of liquidity would disappear if one assumed that unsecured creditors of a bankrupt debtor will nonetheless be repaid most of their claims. However, both Bebchuk and Fried and this Article assume a bankruptcy liquidation scenario of an insolvent debtor in which the return to unsecured creditors is likely to be small. See Bebchuk & Fried, *supra* note 1, at 862; *supra* note 130 and accompanying text.

243. Under the most stressed assumptions of a 60%/20% bankruptcy risk and a 10% reduction in liquidity, the expected value of unsecured claims in this example would be \$826,000 under a partial priority rule. See *supra* note 240. Under a full priority rule, the expected value is \$800,000, a difference of merely 3.25%.

imposing a rule that is likely to have a “significant chilling effect”²⁴⁴ on secured credit.²⁴⁵

IV. THE EFFICIENCY OF SECURED CREDIT

A. Defining Efficiency

To conclude that secured credit is efficient, one must agree on the standard by which to measure efficiency. Economists generally recognize two types of efficiency.²⁴⁶ In our context, “Pareto efficiency” means that the secured credit would make the secured creditor and, possibly, the debtor better off but no unsecured creditors worse off.²⁴⁷ Secured credit therefore would be Pareto efficient if the loan proceeds increased the debtor’s value without reducing the value of the unsecured debt.²⁴⁸ “Kaldor-Hicks efficiency,” on the other hand, means that the harm to unsecured creditors (minus any benefit to them) does not exceed the benefit to the debtor and the se-

244. Telephone Interview with Peter V. Pantaleo, *supra* note 227. Of course, the impact of this “chilling effect” on liquidity may depend on whether secured lenders could find alternative ways to redeploy their funds. See *supra* notes 225-26 (discussing the possibility that secured lenders would shift their money to other investments).

245. Some commentators suggest that secured credit may create inefficient signaling. Their argument assumes that a debtor that wants access to more credit may have an incentive to send “signals” to potential lenders demonstrating the strength of its business, and that borrowing on a secured basis sends such a positive signal. See, e.g., Schwartz, *Analysis of Security*, *supra* note 1, at 2084 (“Borrowers are sometimes said to give security to signal that they are good risks . . .”); Triantis, *supra* note 74, at 249-55 (hypothesizing that a firm can signal its financial strength to the market by taking on more secured debt than the industry average); Christopher M.E. Painter, Note, *Tort Creditor Priority in the Secured Credit System: Asbestos Times, the Worst of Times*, 36 STAN. L. REV. 1045, 1054 (1984) (“[S]ecured credit allows the debtor to signal her economic strength by her willingness to encumber her assets.”). The concern, however, is that asymmetric information between the debtor and its creditors could make such signaling inefficient. See Schwartz, *Analysis of Security*, *supra* note 1, at 2084-85. That concern is not realistic because its underlying assumption—that borrowing on a secured basis sends a positive signal about the credit risk of the debtor—is profoundly contrary to experience and common sense. As Professor Mann has noted, “the strongest companies in our economy ordinarily do not secure their debt.” Mann, *supra* note 91, at 629. Indeed, with the exception of “non-recourse” debt, a debtor with a strong business typically will borrow on an *unsecured* basis. See *supra* Part III.E and *infra* Part V.B. And non-recourse debt signals nothing about the debtor’s general business because it does not even create a claim against the debtor. See *supra* note 167 and accompanying text. At most, non-recourse debt signals that the project is, but the debtor may or may not be, a good credit risk.

246. See POSNER, *supra* note 90, at 13-14.

247. See Thomas Miceli & Kathleen Segerson, *Defining Efficient Care: The Role of Income Distribution*, 24 J. LEGAL STUD. 189, 192-93 (1995).

248. See *id.*; Schwartz, *Review of Theories*, *supra* note 1, at 27-28.

cured creditor.²⁴⁹ Secured credit, with appropriate monitoring, therefore is Kaldor-Hicks efficient.

Bebchuk and Fried suggest that secured credit would be efficient in a “hypothetical world” in which “the creation of a security interest under full priority would *never* impose a negative externality on [unsecured] creditors.”²⁵⁰ They therefore seem to be making a claim about Pareto efficiency. Admittedly, even new money secured credit may or may not turn out to be Pareto efficient in a given transaction because unsecured creditors *might* be prejudiced by subsequent events.²⁵¹ However, it isn’t clear why Bebchuk and Fried would impose, or indeed whether they intend to impose, a Pareto efficiency standard on secured credit.²⁵² In terms of making policy decisions and crafting legal rules, the concept of Pareto efficiency is not particularly helpful. After all, most legal rules impose costs on some parties and benefits on others, which must be balanced:

Because the conditions for Pareto superiority are almost never satisfied in the real world, . . . it is pretty clear that the operating definition of efficiency in economics is not Pareto superiority. When an economist says that [something] is efficient, nine times out of ten he means Kaldor-Hicks efficient²⁵³

Nonetheless, one remains uneasy (and perhaps this accounts for Bebchuk and Fried’s ambiguity) by the apparent unfairness of justifying secured credit by comparing whether the gain to the secured creditor and debtor exceeds the detriment to unsecured creditors. For this reason, I do not suggest that Kaldor-Hicks efficiency ends the discussion. Rather, I propose a new measure of efficiency, which I call “class Pareto efficiency,” reflecting my belief that the proper unit of analysis is the class and not the individual. A transaction is class Pareto efficient if it is Pareto efficient when each class of persons affected by the class of transactions is viewed as a single collective person. Therefore class Pareto efficiency exists whenever the overall gains to each affected class exceed the losses to such class

249. See POSNER, *supra* note 90, at 13-14.

250. Bebchuk & Fried, *supra* note 1, at 864 (emphasis added).

251. As noted earlier, this possibility can be minimized by monitoring the debtor’s use of proceeds. See Part II, *supra*.

252. A possible explanation is that Bebchuk and Fried are suggesting that if secured credit has no distributional consequences for unsecured creditors, it must be efficient. That explanation leaves open the possibility of Kaldor-Hicks efficiency.

253. POSNER, *supra* note 90, at 14.

even if some members of the class lose value. From a policy standpoint, that not only means that the transaction is Pareto efficient when viewed from the overall perspective of affected classes but also that the transaction is *necessarily* Kaldor-Hicks efficient as to members of each affected class.²⁵⁴ Class Pareto efficiency is therefore a useful way of assessing the policy impact of an action on affected groups, such as the policy impact of secured credit on unsecured creditors.²⁵⁵

New money secured credit appears to be class Pareto efficient because such credit would make the classes of secured creditors and debtors better off, without making unsecured creditors, as a class, worse off.²⁵⁶ Unsecured creditors as a class are better off under a rule of full priority because the availability of secured credit increases debtor liquidity and therefore increases the expected value of unse-

254. The aggregate benefits must exceed the harm to the class for the transaction to be class Pareto efficient in the first place. Class Pareto efficiency therefore could be described as Kaldor-Hicks efficiency *within each class* of persons affected by a transaction. Alternatively, class Pareto efficiency could be described as the application of Pareto efficiency on an *ex ante* basis, without regard for *ex post* consequences. That, however, would be a counter-intuitive proposition: one normally thinks of Pareto efficiency as meaning no person will be harmed, but a transaction could be *ex ante* Pareto efficient even where, statistically, some persons will be harmed.

255. Dean Anthony Kronman of Yale Law School apparently has suggested an approach that is similar to class Pareto efficiency:

[U]nlike a court, a legislature must evaluate the effects of proposed rules on classes of persons rather than on particular, identifiable individuals. For these reasons, a strictly individualistic interpretation of paretianism is likely to make the principle unworkable in all but a few cases. How should the principle be interpreted, then? Although the matter is by no means free from difficulty, one reasonable approach is to interpret paretianism as requiring only that the welfare of *most people* who are taken advantage of in a particular way be increased by the kind of advantage-taking in question.

Anthony T. Kronman, *Contract Law and Distributive Justice*, 89 YALE L.J. 472, 487 (1980) (emphasis in original). Dean Kronman applied his concept to disputes between parties to a contract. See *id.* at 486-87 (applying the approach to a fraudulent sale of a watch). I would apply the approach only to externalities, because applying it to the contract parties themselves would appear to undercut the consensual nature of their contract. See also MICHAEL J. TREBILCOCK, *THE LIMITS OF FREEDOM OF CONTRACT* 83 (1993) (commenting on Kronman's analysis). Furthermore, the normative argument for freedom of contract—voluntary assent on the part of all parties—also justifies a standard of class Pareto efficiency; all creditors *ex ante* would want a class Pareto efficient contract to be enforced, even if some creditors are harmed *ex post*.

256. This Article does not suggest, and it would not be true, that unsecured creditors benefit as a class because the gains to adjusting creditors exceed the losses to nonadjusting creditors. The analysis in this Article has assumed that the unsecured creditors discussed are nonadjusting. Thus this Article's conclusions would be equally applicable even if the class of unsecured creditors consisted solely of nonadjusting creditors.

cured claims.²⁵⁷ The only potential flaw is “the possibility that the losses of even one inefficient transaction could overwhelm the efficiency gains of all the other transactions put together.”²⁵⁸ However, I have already shown that, whether or not any given secured transaction is Pareto efficient, the probability is that the *average* secured transaction will be Pareto efficient in that the debtor and secured creditor will benefit and unsecured creditors will not lose (and indeed may gain) value.²⁵⁹ There is no reason to believe that losses suffered by unsecured creditors in an inefficient transaction will exceed gains enjoyed by unsecured creditors in an efficient transaction. In an efficient transaction, the liquidity provided by secured credit will save a debtor from bankruptcy. Unsecured creditors then will recover, rather than lose, their investments. In an inefficient transaction, in contrast, the liquidity will cause good money to be thrown after bad, and the debtor will fail anyway. Unsecured creditors may then lose their investments. With respect to unsecured creditors as a class, would the loss caused by a debtor’s failure be likely to exceed the increased recovery that results from the debtor’s avoiding bankruptcy?

At first blush, it might appear that loss of an entire loan exceeds mere improvements in the likelihood of recovery. But that initial impression fails to recognize that preventing the debtor’s bankruptcy avoids the loss. Therefore, from the point of view of unsecured creditors, the desirability of secured credit must be evaluated by looking at the difference between being paid in full (if the debtor avoids bankruptcy) and, in a worst case scenario, not being paid at all (if the debtor goes bankrupt). Using that standard of measurement, losses flowing from an inefficient transaction generally will be equal to the gains accruing in an efficient one. Mathematically, if an event has a greater probability of causing gain than loss, and if the magnitude of the gain and the loss generally would be equal, a statistically large number of such events is likely to result in a net gain. That describes the effect of secured credit on unsecured claims. It therefore is reasonable to conclude, in the absence of empirical evidence to the contrary, that secured credit for new money is class Pareto efficient.

257. See *supra* Part III.F.

258. Shupack, *supra* note 1, at 1124 (suggesting that the absence of empirical data prevents any certain conclusions as to the Kaldor-Hicks efficiency of secured transactions as a social institution).

259. See Part III.F, *supra*.

B. A Partial Priority Rule May Be Costly and Ineffective

Because the availability of full priority liens for new money is efficient and does not generally take value from unsecured creditors, there does not appear to be a pressing need for a partial priority rule. Those who support such a rule should bear the burden of proving that the use of secured credit is inefficient. Imposing this burden on the proponents of a partial priority rule is especially appropriate because a partial priority rule may actually be costly and ineffective.

One such cost would arise because sophisticated lenders often could avoid the limitations of a partial priority rule by restructuring their loan transactions as sales. Sales and secured loans are typically thought of as separate and identifiable legal categories. In the simplest forms of these transactions, one either sells asset X for \$Y, or one pledges asset X as collateral for a loan of \$Y. However, these categories quickly break down in sophisticated transactions, especially (although not exclusively) when financial assets are sold.²⁶⁰ Even the Uniform Commercial Code acknowledges the difficulty of distinguishing sales from secured loans by treating sales of accounts and chattel paper as if they were secured loans.²⁶¹ The same blurring of categories increasingly occurs in transfers of non-financial assets.²⁶²

260. See, e.g., Pantaleo et al., *supra* note 30, at 159. Pantaleo explains:

Transfers of financial assets in which the parties state that they intend a sale, and in which all the benefits and risks commonly associated with ownership are transferred for fair value in an arm's-length transaction, are easily identifiable as sales. The issue becomes complicated if the buyer retains recourse to the seller such that less than all of the risks of ownership are transferred. In that case, an issue can arise over whether to view the transaction as a sale or secured loan.

Id.

261. See U.C.C. § 9-102(1)(b) (1995) (stating that Article 9 of the Uniform Commercial Code (governing secured transactions) applies "to any sale of accounts or chattel paper"); see also *id.* cmt. 2 (explaining that "[c]ommercial financing on the basis of accounts and chattel paper is often so conducted that the distinction between a security transfer and a sale is blurred, and a sale of such property is therefore covered by section (1)(b) whether intended for security or not").

262. Repurchase agreements, for example, often raise such issues. A debtor/seller may transfer asset X to a secured party/buyer for consideration of \$Y in a transaction that is explicitly characterized by the parties as a sale. So far, this is a pristine sale. But if the debtor/seller has a contractual right to buy back the asset at a future date for a repurchase price of \$Y+Δ, the transaction takes on the economic characteristics of a secured loan. Unfortunately, there rarely is an "acid test" for sale versus secured loan characterization. Bankruptcy courts sometimes have to deal with these tough recharacterization issues. Cf. *International Trade Admin. v. Rensselaer Polytechnic Inst.*, 936 F.2d 744, 751 (2d Cir. 1991) (looking at the "economic substance of the transaction and not its form," in determining whether a triple net lease should be treated as a sale for a term of years or a lease (internal quotation marks omitted)). If the partial priority rule were adopted, bankruptcy courts would have to do so a lot more often.

If secured creditors were penalized by a partial priority rule, they would have incentives to restructure financing transactions as sales, which are not subject to the rule. However, sales and secured loans for new money can have similar third party effects. Therefore, the consequence of a partial priority rule might be to foster more complex (and therefore costly) forms of sale transactions, without gaining any significant third party benefits.

To demonstrate that a fully secured loan and a fair market value sale can have similar third party effects, consider the following hypothetical. A company has assets worth $\$X$ and unsecured claims of $\$Y$. If the company *borrow*s $\$Z$ on a fully secured basis, the company would be left with assets of $\$X + Z$ (the original assets plus the loan proceeds) and liabilities of $\$Y + Z$ (the unsecured claims and the new secured claim). If the company now loses the $\$Z$ of loan proceeds, it is left with assets of $\$(X + Z) - Z = \X . The secured creditor, however, has a priority claim against assets worth $\$Z$, leaving only $\$X - Z$ for payment of the $\$Y$ of unsecured creditors. Now compare that hypothetical to the same company which instead decides to *sell* $\$Z$ of its assets for a fair market value of $\$Z$. After giving effect to the sale, the company has assets of $\$X - Z + Z$ (i.e., the original assets of $\$X$, reduced by the $\$Z$ of assets sold but increased by the $\$Z$ of sale proceeds). If the company then loses the sale proceeds, its assets will reduce to $\$(X - Z + Z) - Z = \$X - Z$ and its liabilities will remain at $\$Y$. The $\$Y$ of unsecured creditors therefore can look only to the $\$X - Z$ of assets to be repaid, the same result that occurs with a secured loan. A partial priority rule therefore would not only be unnecessary but also would be potentially harmful to unsecured creditors because debtors would have incentives to incur the extra costs involved in structuring financing transactions as sales.

CONCLUSION

A legal convention that endures time and experience should not be rejected based on pure theory untempered by reality.²⁶³ Legal scholars would do well to adopt the same healthy skepticism that scientists bring to theories of physical reality. Scientists are taught to view theory skeptically and to step back and ask whether theoretical

263. Of course, the fact that a legal convention has endured for a long time does not mean it is beyond reproach. Slavery, for example, was relatively longstanding and widespread. I do not suggest that theory is incapable of overcoming convention, but rather that theoretical attacks on convention should be engaged in with a healthy skepticism, tempered by reality.

applications make sense. A nonsensical result usually results from a mistake in the assumptions or methodology underlying the theory; rarely does it reveal a paradigm shift in how reality should be viewed.²⁶⁴

In analyzing the controversy surrounding the priority of secured credit, one therefore must first understand how secured credit is used, including distinctions between liens securing antecedent debt and new money liens, and between the use and availability of secured credit. Using those distinctions, this Article has shown that a debtor incurs significant costs, collectively referred to as Theta (θ), when it encumbers its assets. Because the interest rate differential between secured and unsecured debt is small compared to θ , a rational debtor is economically motivated only to use secured credit when it needs liquidity. Actual debtors thus have no economic motive to take value away from unsecured creditors by prematurely encumbering assets.

New money secured credit does not necessarily prejudice unsecured creditors because the proceeds of the loan largely offset the collateral pledged to secure it; the assets on which unsecured creditors can levy therefore are not reduced.²⁶⁵ But unsecured creditors still may be prejudiced by subsequently occurring events, including the debtor's bankruptcy. This Article has shown by a three-part argument that new money secured credit does not generally prejudice unsecured creditors. First, it has shown that monitoring of loan proceeds by the secured creditor can prevent their misuse. Second, it has argued that secured credit is statistically unlikely, when viewed from the standpoint of unsecured creditors, as a class, to transfer expected value from unsecured creditors in the event of a debtor's bankruptcy, because the availability of secured credit provides liquidity which reduces the chance of a debtor's subsequent bankruptcy and, in turn, actually *increases* the expected value of its unsecured claims.²⁶⁶ Third,

264. See generally THOMAS S. KUHN, *THE STRUCTURE OF SCIENTIFIC REVOLUTIONS* (Univ. of Chicago Press 3d ed. 1996) (1962) (discussing the nature of the scientific process and the intermittent emergence and replacement of scientific paradigms). Even in science, theory sometimes can change how we view the world. The theory of quantum mechanics, which postulates that light sometimes behaves as a wave and sometimes as a particle, is a good example. See generally STEPHEN HAWKING, *BLACK HOLES AND BABY UNIVERSES AND OTHER ESSAYS* 69 (1993) (opining that the theory of quantum mechanics "completely changed the way we think about space and time, and about reality itself"). This Article merely urges legal scholars to be skeptical of theory, while remaining open to the possibility of change.

265. See *supra* note 217.

266. This Article does not need to distinguish between tort creditors and other unsecured creditors. Under the logic of the Article, no type of unsecured creditor is likely to be preju-

it has shown that because of imperfections arising under bankruptcy law, new money liens are usually created only where they help an otherwise viable debtor avoid bankruptcy and do not generally sustain debtors that should be allowed to fail. New money secured credit therefore should be Kaldor-Hicks efficient.

However, Kaldor-Hicks efficiency alone cannot end the secured credit debate. This Article has found it useful to adopt a new economic term, class Pareto efficiency, meaning that a type of transaction (in this case, new money secured credit) is Pareto efficient when viewing each class of persons (including unsecured creditors) affected by new money secured credit transactions as a single collective person. New money secured credit is class Pareto efficient. Although Bebchuk and Fried and others would like to limit secured debt, unsecured creditors as a class *should want* a debtor to have access to secured credit because class Pareto efficient transactions are necessarily Kaldor-Hicks efficient as to persons within the class.

This Article also has shown that secured credit does not create inefficient signaling. The perception that borrowing on a secured basis sends a positive signal about the credit risk of the debtor is contrary to experience and common sense. Even though there is an asymmetry of information between a debtor and its creditors, privately optimal and socially efficient actions should coincide because the benefit of secured credit will exceed the cost of θ only for weak debtors that cannot borrow on an unsecured basis.

A partial priority rule therefore is theoretically unnecessary to protect unsecured creditors as a class.²⁶⁷ Indeed, such a rule may be costly and ineffective because it would reduce liquidity for troubled but otherwise viable debtors and also would create incentives for sophisticated lenders to restructure financing transactions as sales having some of the same third party effects as secured loans, but higher transaction costs. Viewed from the perspective of bankruptcy policy, a partial priority rule therefore might enhance equality of distribution but at the expense of reducing the overall distribution to unsecured creditors and impairing the debtor's ability to rehabilitate. Accordingly, those who advocate restricting the availability of secured credit should bear the burden of showing, by persuasive empirical

diced by new money liens. For a contrary view, see LoPucki, *supra* note 1, at 1898-99. In any event, trade creditors are unlikely to remain as nonadjusting creditors because of their short-term maturities, typically 30, 60 or 90 days. Once repaid, they can adjust the terms of subsequent extensions of credit. *See id.* at 1936.

267. Or, indeed, to protect nonadjusting unsecured creditors as a class.

evidence, that unsecured creditors as a class need protection.²⁶⁸ Secured credit should not be regulated until that burden is met.²⁶⁹

This Article also answers the two questions that Professor Alan Schwartz says have “figured largely in [the security interest] debate. First, how, if at all, does a later security-financed project alter the value of earlier debt? Second, why would a firm finance projects with secured debt rather than unsecured debt . . . ?”²⁷⁰ It answers the first question by confirming that, except for non-recourse debt,²⁷¹ a later security-financed project reduces the expected value of earlier debt *unless* the firm needs liquidity and cannot obtain unsecured debt. It answers the second question by using the concept of θ to show that a firm generally would want to avoid financing projects with secured debt (other than non-recourse secured debt) rather than unsecured debt; the firm therefore would have an incentive to use secured debt *only* if it needed liquidity and unsecured debt was unavailable. The availability of secured credit when unsecured credit is unavailable assures a debtor’s liquidity, which in turn maximizes the expected value of unsecured claims. The debtor’s motivation not to prematurely use

268. Even assuming unsecured creditors as a class are thought to need protection, that protection already may exist in corporate law. Directors of a corporation which has a reasonable expectation of becoming bankrupt or insolvent may have a fiduciary obligation to unsecured creditors as well as to shareholders. See *supra* note 160 and accompanying text. Accordingly, if those directors permit the corporation to incur secured debt in circumstances where the corporation is likely to go bankrupt anyway, thereby impairing the value of unsecured claims, the directors may well have breached their fiduciary obligation.

269. One of my colleagues, Richard Schmalbeck, stated this point elegantly:

In the circumstances in which unsecured creditors are most at risk, the availability of new money loans may so provide liquidity that the debtor often can avoid bankruptcy. In those cases, everybody wins. Therefore regulators should go slowly in taking steps that might compromise the ability of debtors to obtain new, secured credit.

270. Schwartz, *Analysis of Security*, *supra* note 1, at 2074.

271. Non-recourse debt does not significantly affect the expected value of unsecured claims. See *supra* Part III.E.

secured credit therefore solves the puzzle of why new money secured credit, as actually used in the marketplace, is not only efficient but fair.²⁷²

272. Some have defended full priority on the basis of freedom of contract. See e.g., Harris & Mooney, *supra* note 1, at 2049-53 (embracing the “baseline principles that underlie current law insofar as it generally respects . . . the ability of parties to enter into enforceable contracts,” and noting the “positive value of permitting debtors to give security freely and effectively”). However, “freedom of contract arguments have force only with respect to arrangements that do not create direct externalities.” Bebchuk & Fried, *supra* note 1, at 933. “[W]hen the contract *directly* impinges on the rights of third parties, there is no prima facie presumption of freedom of contract.” *Id.* (emphasis added). I have argued, however, that new money liens are unlikely to create externalities, and never create *direct* externalities. See *supra* text accompanying notes 39-42. If unsecured creditors are prejudiced at all, it is only by “subsequently occurring events.” See *supra* text accompanying notes 43-45. Because there are no direct externalities, it would appear that freedom of contract should be respected. Indeed, a freedom of contract argument is particularly compelling in the context of secured credit because a partial priority rule would create the anomaly that solvent debtors are free to give away assets as gifts, but would not be free to give a full priority security interest in the same assets even for the consideration of new money. Yet the law “traditionally disfavors not-for-value exchanges but protects for-value exchanges.” Steven L. Schwarcz & Alan E. Rothman, *Civil Forfeiture: A Higher Form of Commercial Law?*, 62 FORDHAM L. REV. 287, 309 (1993). At the very least, therefore, freedom of contract should justify new money liens given by debtors that are solvent and remain solvent immediately after giving effect to the lien.